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Corporate Real Estate Sale and Leaseback Effect: New Evidence from Western Europe

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CORPORATE REAL ESTATE SALE AND LEASEBACK EFFECT: NEW EVIDENDCE FROM WESTERN EUROPE

TUTKIMUKSEN TARKOITUS

Tämän tutkielman tavoitteena on tutkia sale and leaseback (SLB) -transaktioiden vaikutusta yritysten tunnuslukuihin ja osakkeenomistajien varallisuuteen. Tavoitteena on selvittää, missä taloudellisessa tilanteessa yritykset ajautuvat SLB-transaktioon, ja miten se muuttaa niiden tunnuslukuja. SLB:n vaikutusta osakkeenomistajien varallisuuteen arvioidaan standardin tapahtumatutkimuksen avulla selvitetyillä epänormaaleilla tuotoilla. Taloudellisten taustojen ja transaktiospesifien muuttujien yhteyttä epänormaaleihin tuottoihin selvitetään moni-muuttujaregression avulla. Testattavia, jo olemassa olevia hypoteeseja, ovat financial distress ja tax savings -hypoteesit. Näiden lisäksi tutkielman tarkoitus on myös esittää ja testata uusia, aikaisemmin testaamattomia SLB:n epänormaaleja tuottoja mahdollisesti selittäviä teorioita. Näistä tärkeimpiä ovat hidden values, kuten latent assets (Brennan, 1990) ja hidden reserves (Woudenberg, 2000) -hypoteesit, sekä investment and financing strategy (Vijh, 2002) -hypoteesit. Muita testattavia hypoteeseja ovat fokusointi- ja taloudellinen tila -hypoteesit.

LÄHDEAINEISTO

Tutkielma pohjautuu pääasiassa itse kerättyyn 125 länsieurooppalaisen myynti- ja takaisinvuokraustapahtuman kattavaan aineistoon. Koska SLB:lle ei ole olemassa keskitettyä tietokantaa, on transaktiot ollut pakko kerätä useista eri tietolähteistä, kuten Reutersin Factiva-tietokannasta, internetin julkisista tietokannoista, eri maiden pörssien omista pörssitiedotetietokannoista, yritysten kotisivuilta sekä useista erillisjulkaisuista. Jokainen ilmoitus on pyritty jäljittämään yrityksen pörssitiedotteeseen, mikäli se vain on ollut julkisesti saatavilla. Pörssitiedotteista on kerätty transaktiospesifiä tietoa mm. varojen käytöstä ja portfolion sisällöstä. Taloudellinen markkinadata ja yrityskohtainen aineisto on haettu Datastream- ja ThomsonOneAnalytics tietokannoista.

TULOKSET

SLB-yritysten tunnuslukuanalyysi antoi yleisten näkemysten vastaisia tuloksia. Yritysten tunnuslukuja on ennen transaktiota kuvannut alhainen ROA, mutta se näyttää edelleen laskevan transaktion seurauksena. Myöskään keskimääräisestä taloudellisesta ahdingosta ennen SLB:iä ei ole merkkejä. Osakkeenomistajien epänormaali tuotto Länsi-Euroopassa on 1,03 prosenttia ja vastaa aikaisempien tutkimusten tuloksia. Tutkimus tukee hidden values [latent assets (Brennan, 1990) ja hidden reserves (Woudenberg, (2000)], sekä investointistrategia (Vijh, 2002) -hypoteeseja. Erityisesti Brennanin esittämä latent assets -hypoteesi saa kannatusta jakamalla voimakkaasti kumulatiiviset epänormaalit tuotot muista havainnoista. Ilman tukea jäivät financial distress-, tax savings-, fokusointi- ja financing strategy -hypoteesit. SLB on keskimäärin kannattavaa, kun yritys vapauttaa piilossa olevia varoja yrityksen ydinliiketoiminnan käyttöön, mutta ei tee sitä taloudellisessa ahdingossa. Selkä seinää vasten tehty transaktio saattaa antaa yritykselle lisäaikaa, mutta saattaa aiheuttaa myös kiinteistöjen myynnin alihinnalla ja suurilla leasing-maksuilla. Positiivinen kurssireaktio on seurausta epäsymmetrisen tiedon vähenemisestä ja kasvaneista tulevaisuuden tuotto-odotuksista.

AVAINSANAT

Sale and leaseback, event study, shareholders wealth, hidden value

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Abstract
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CORPORATE REAL ESTATE SALE AND LEASEBACK EFFECT: NEW EVIDENDCE FROM WESTERN EUROPE

PURPOSE OF THE STUDY

The objective of this thesis is to examine the sale and leaseback (SLB) effect on companies' ratios and on shareholders' wealth in Western Europe. The study examines under what financial backgrounds companies enter into SLBs, and how the transaction is likely to affect the companies' financial ratios. The study aims to discover what characteristics are likely to cause the positive abnormal return. The abnormal returns are examined using standard event study methodology. Different hypotheses are tested using several regression models. The testable hypotheses range from the prior tax savings and financial distress hypotheses to the new investment and financing strategies hypotheses (Vijh, 2002), and hidden values hypotheses which concern latent assets (Brennan, 1990) and hidden reserves (Woudenberg, 2000). The focus and financial state hypotheses are also tested.

DATA

The data in this study had to be searched and handpicked manually. The transaction data were collected from various sources, including company web sites, Reuters' Factiva database, companies' press releases at stock exchanges, and many other sources. When an announcement was detected, it was tracked down to the original press releases which were then used to get deal-specific information. Basic financial data was obtained from the Datastream and ThomsonOneAnalytics databases.

RESULTS

The financial ratio analysis gave results that were contradictory to what had been suggested earlier. Companies had suffered from low profitability prior to the transaction and only went downhill after it. On the other hand, companies do not suffer from financial distress prior to the transaction, as has been commonly suggested. The impact on shareholders' wealth is 1.03 percent positive at the standard 1% significance level, which is in line with previous studies. The overall results strongly support the latent assets hypothesis presented by Brennan (1990). Also hidden reserves (Woudenberg, 2000), financial state and investment strategy (Vijh, 2002) hypotheses are supported. The financial distress, tax savings, and financing hypotheses are not supported in Western Europe. The results support the view that the financial state of the companies is connected to the terms of transaction. The better the financial state of the company is, the better terms it can get itself. This is reflected in higher abnormal returns. Overall, the positive market reaction results from decreased information asymmetry between investors and the management and an increase in expected future growth opportunities.

KEYWORDS

Sale and leaseback, event study, shareholders wealth, hidden value

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Helsinki, 31 March, 2005

Tomi Grönlund

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1. INTRODUCTION

1.1 Background of the Study

Corporate real estate, representing the largest single asset class on the balance sheets of companies, plays many important roles in their day-to-day business. It has simultaneous operational, financial, and strategic features, which only serve to confuse people. In recent years, the economic press has reported an increasing number of corporate real estate disposals in Europe. The idea that corporate property ownership is not the core business of companies and should be outsourced to professionals originally received a lot of attention in the United States (Nappi-Choulet, 2002). The drive to outsource corporate real estate seems to be a logical progression in the drive to outsource all non-core activities, such as information technology and manufacturing, and to focus on the core business. One of the most important forms of corporate real estate disposals is the sale and leaseback (SLB) transaction, which has become a common phenomenon in both the U.S. and the European market.

Compared to the U.S., SLB transactions have a relatively short history in Europe. Both Lapuma (2003) and Nappi-Choulet (2002) show some evidence on how the trend began in Europe in the late 1990's when corporate real estate disposals started to increase rapidly with a number of large companies completing SLB transactions of large parts of their corporate real estate portfolios. Nappi-Choulet (2002) also reports that European companies have significantly more real estate assets in their balance sheets and use significantly more owner occupied real estates than their U.S. counterparts. Brounen and Eichholtz (2004), on the other hand, document that companies applying more leased properties than owned ones to contribute to their core business exhibit higher returns on their shareholders' wealth. Krumm and Linneman (2001) suggest that the poorly developed commercial property market, which has not been able to offer companies any other choice but to own their properties, is partly to blame for the large corporate real estate portfolios. This is in line with Nappi-Choulet's (2002) argument that the move to outsource large property portfolios goes hand in hand with a more developed property market. Also Laposa and Charlton (2001) argue that a partial reason for the poorly developed state of real estate outsourcing in Europe is the lack of recognition European corporate outsourcing firms face in the non-property world. Overall, the studies suggest that there is little reason for the trend to outsource corporate real estates not to continue.

Corporate real estate SLB is a financial transaction that challenges the traditional buy and hold property thinking. Under an SLB transaction a company that owns real estate sells it but simultaneously leases it back. This enables it to raise cash and unlock cost efficiencies, whilst retaining the functional value of the real estates. The main motives for sale and leaseback operations, in addition to raising cash (Holman, 1988), are identified to stem from off balance sheet funding, diversification of funding sources, improved efficiency, and the disposal of low yielding assets. Nappi-Choulet (2002), suggests that the main motive would be that by outsourcing real estates the company obtains a clearer picture of its core competencies which, in turn, helps it to focus on its most profitable business segments. Louko (2004) argues that shareholders often think that their in-house manager is not always the best person to manage real estate most efficiently. Therefore, possible advantages arise from the logic that specialized real estate professionals are probably able to manage real estate risks and costs more efficiently. Overall, outsourcing provides additional finance, operational efficiency and flexibility which, in turn, are critical components of competitive advantage (Hitt et al., 1999). This suggests that an SLB transaction can be viewed as the managements' logical extension toward traditional value based management.

The capital market impact of various financing announcements on shareholders' wealth plays an important role in the theory of corporate financial economics, providing vital signals to measure the effect of an economic event on the value of a firm. According to a seminal paper by Myers (1984), asymmetric information affects the choice between internal and external financing, and between new issues of debt and equity. This leads to a pecking order between corporate financing choices, a notion supported by Smith (1986), who also suggests that the firms' maximizing behaviour implies that, in voluntary transactions, the firm should structure the transaction to yield the highest possible value of the firm. To maximise the value of the firm, it is important to understand how the market reacts to announcements of choosing different types of finance.

At present, there are several publicly available papers that examine the SLB effect on shareholders' wealth [e.g., Slovin et al. (1990), Rutherford (1990, 1992), Alvayay et al. (1995), Ezzel and Vora (2001), and Devaney and Lizieri (2004)]. A clear majority has discovered that a corporate real estate SLB, on average, has a positive effect on the stock price (shareholders' wealth) if the market movements and the risk free interest rate are controlled for. According to previous studies, the positive impact on shareholders' wealth comes either at the expense of the

government or bondholders. For example, Slovin et al. (1990) explain that the positive market reaction follows from the fact that an SLB transaction allows the company to decrease its present value of future taxes, as Lewellen et al. (1976) and Myers et al. (1976) demonstrate in their papers. These papers argue that an SLB is an identical transaction compared to leasing, and enables companies to sell their valuable depreciation tax shields to higher tax rate buyer-lessors, thereby benefiting the companies in the form of lower lease payments. Rutherford (1990), on the other hand, suggests that the positive impact on shareholders' wealth comes at the expense of bondholders or the government. However, Rutherford (1992) found out that bondholders did not lose in the transaction which, according to him, supports the other possible explanation, i.e. the tax savings hypothesis. Alvayay et al. (1995) argue and provide evidence that, due to the U.S. tax reform act of 1986, the SLB transaction no longer offers any gains to the company. However, regardless of this, Ezzel and Vora (2001) again manage to show results in support of the tax savings and financial distress hypotheses.

As is evident, previous studies only serve to create a conflict between the existing possible explanations and demonstrate the lack of clear consensus about the characteristics that are likely to explain the positive corporate real estate SLB abnormal event returns. This, on the other hand, suggests that the reasons behind the positive market reaction to SLBs, in addition to the wealth transfer hypothesis, may be more varied. Furthermore, there is still no study that would examine the financial conditions under which companies enter in sale and leaseback opereations, and how the transaction affects their financial ratios.

Compared to previous studies, this study starts with the notion that an SLB, in simple terms, consists of two simultaneous transactions: an asset sale (usually of a real estate portfolio), and a leasing contract to lease the assets back. In finance this is usually regarded as the equivalent of a plain vanilla debt. This is supported by, for example, the observation that the capital market impact of an SLB announcement creates, on average, a positive market reaction on shareholders' wealth, while leasing and debt financing announcements, on average, yield a negative or zero impact (e.g., Smith, 1986).

In this study I first review the existing SLB literature, update the current SLB framework, and analyse the financial situation in which companies usually enter into SLB, as well as its effects on their financial ratios, and the characteristics that are likely to result in a positive announcement effect. Therefore, in addition to existing theories, such as the tax savings and financial distress

hypotheses, I give ideas about alternative theories to detect those characteristics that might result in abnormal returns. The new and untested theories include hidden values such latent assets presented by Brennan (1990), and hidden reserves presented by Woudenberg (2000). In addition, I take advantage of Vijh's (2002) findings about equity carve-outs and test the financing and investment strategy hypotheses. To test the commonly proposed argument that SLBs are usually made under financial distress [e.g. Clarke and Adams (1994), Financial Times (2003)], I include several financial ratios to test how the financial situation is related to abnormal returns. In this study, I utilise a sample of 125 SLBs announced in eleven Western European countries over a time period ranging from 1998 to 2003.

This study extends my bachelor thesis "Corporate Real Estate Sale and Leaseback Effect", a modified, reviewed and extended version of which, written in co-operation with professor Ph.D. Mika Vaihekoski and researcher M.Sc.(Tech.) Antti Louko, is currently under review by the European Financial Management Journal. As far as we know, the article-to-be "Corporate Real Estate Sale and Leaseback Effect: Empirical Evidence from Europe" utilises the largest SLB sample in the world. It is also the first study to examine the phenomenon in Europe utilising a proper sample size that enables statistically significant observations.

1.2 Research Problem and the Research Question

The purpose of this study is to identify and describe the key factors and characteristics that influence abnormal returns on shareholders' wealth in sale and leaseback operations. Furthermore, the study aims to identify the right selection criteria to use in sale and leaseback financing. In addition to contributing to scientific literature, the study also aims to support practical finance situations by dissecting the sale and leaseback transaction into its main components.

The key research problem is as follows:

What key characteristics describe a successful 'sale and leaseback' transaction?

This research problem is explicitly studied from the seller-lessee company's financial point of view. The scope of the study is limited to the stock listed companies in Western Europe, as defined in more detail in the Chapter 5.1. To get the answer to the key research problem, I must

first get an answer to the following research questions that specifies the sale and leaseback institution:

1. What is the sale and leaseback effect on shareholders' wealth?
2. What is the sale and leaseback effect on the financial ratios of companies?
3. What deal- and firm-specific characteristics are likely to cause abnormal event returns?

At this point, I acknowledge that there is no one way to organize the likely optimal sale and leaseback transaction. The outcome and market reaction, as well as the impact on long-term profitability, depend on the organizational and operational needs of the companies, the cost of capital, the state of both the environment and the economy, the quality of the portfolio sold, and, importantly, on transaction-specific variables such as transaction structures and their tax consequences.

1.3 The scope of research

The scope of this study is restricted to examining the SLB announcement impact on shareholders' wealth in Western Europe and the identification of the characteristics behind successful sale and leaseback transactions. The success of an SLB is determined by the value it adds on the shareholders' wealth. This study aims to detect and describe the most important financial and deal-specific characteristics that have an impact on the corporate real estate SLB effect in Western Europe.

The analysis utilizes a sample of 125 sale-and-leasebacks made by Western European companies. This study is, at least as far as I know, the largest and the first to study the factors and issues affecting SLB-related abnormal returns in several European countries. The data contains SLB announcements from eleven West European countries. Some firms in the sample have suffered financial distress during the estimation period prior to the announcement, somewhat contrary to the U.S. data utilised in the study by Slovin et al. (1990). This is especially the case in the European IT, telecom and airline industries. However, sale-and-leaseback transactions have also been common in other industry sectors, such as the retail and hotel sectors. This suggests that the trend is not exclusively driven by the distress affecting certain industries. The study examines the relationship between the SLB announcement effect and the financial state of the companies,

and test several hypotheses that may influence the magnitude of announcement effect. The study gives extra consideration to the presence of hidden values, such as latent assets.

1.4 The Structure of the Thesis

The remaining paper is organized as follows: Chapter 2 presents studies needed to aggregate and illustrate the sale and leaseback framework. Chapter 3 presents the literature related to the sale and leaseback framework, showing what might influence the abnormal sale and leaseback abnormal returns. Chapter 4 rounds up earlier studies of sale and leaseback decisions and their impacts on shareholders' wealth. Chapter 5 presents the hypotheses of the study. Chapter 6 presents the sample data and its descriptive statistics, as well as the event study methodology employed in this study. Chapter 7 presents the results and analysis. Finally, Chapter 8 concludes the paper, discusses the results, and offers some suggestions for further research.

2. THE SALE AND LEASEBACK

Chapter 2.1 presents earlier literature on the SLB framework. Chapter 2.2 discusses the costs of SLB financing. Finally, Chapter 2.3 discusses the motivations of companies to enter into SLB transactions.

2.1 The Sale and Leaseback Framework

The sale and leaseback (SLB) was first introduced by Safeway Stores in 1936 (Rutherford, 1990). Since then SLB transactions have been widely discussed among both academic and practitioners' literature [e.g. Holman et al. (1988), Slovin et al. (1990), Fredrick (1990), Galperin (1992), Alvayay et al. (1995), Nappi-Choulet (2002), Richard (2003), and Louko (2004)]. An SLB is a way to raise cash and an off-balance sheet alternative to conventional long-term financing. A sale and short-term leaseback can also be used to get rid of vacant or soon to be vacant real estate. Under an SLB transaction, a firm owning real estate sells the property and simultaneously executes an agreement to lease the property back for a predefined time period under specific terms. The parties involved are seller-lessee, buyer-lessor, and debt investors. The seller-lessee receives the full market value of the sold property paid by the buyer-lessor, retains the use and the control of the property and is still responsible for most of the operating expenses and significant lease expenses. The transaction may or may not include options.[1] The seller-lessee is usually a professional property investor holding a diversified[2] and professionally managed real estate portfolio. Buyer-lessors of the SLB property get a long-term tenant and relatively safe returns. The lenders may also be more likely to loan more, and at lower rates, on an SLB property, based on a diversified and professionally managed real estate portfolio, and the credit of both seller-lessee and buyer-lessor. The ownership of the property is transferred to the purchaser's assets but normally an especially established special purpose entity (SPE) is used. Conventionally, the majority of debt in SLB transactions has been mortgage debt. However, much of the growth in the SLB industry in the 1990s has been fuelled by the development of commercial mortgage backed securities (CMBS) debt markets. Large pools of loans allow investors to aggregate and minimize risk compared with traditional lending, in which each loan has to be underwritten

[1] Options are included to achieve and maintain flexibility needed by the seller-lessee. Such options include, for example, exit, buyback, expand, and continuing options [see e.g. Golan (1998) and Gibson (2000)].

[2] A way to achieve lower variability of earnings and risk is through diversification [see e.g. Shcallheim et al. (1987), and Schallheim & Lewis (1992).

separately. The development of CMBS markets has created a large universe of potential lenders. This has increased the supply of available loans, lowered pricing and, in the end, stimulated demand. The simplified SLB framework is illustrated in Figure 1.

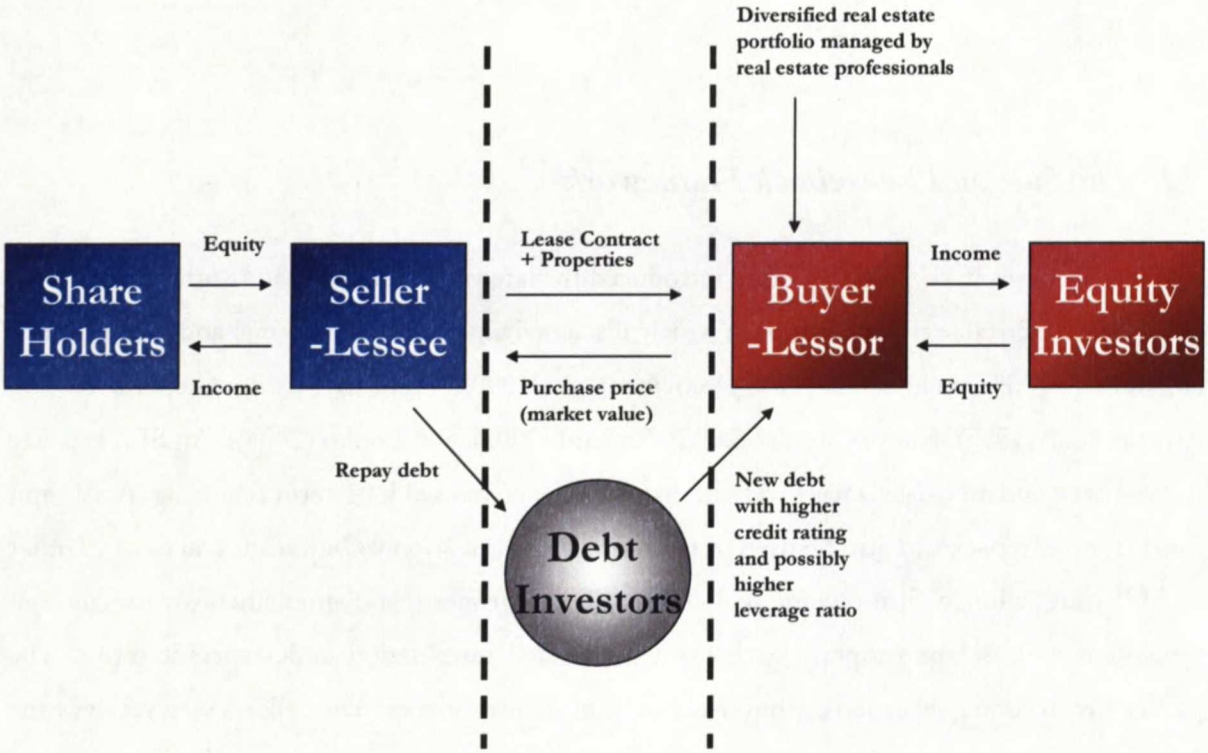

Figure 1. ***A simplified sale and leaseback framework.***

The ability to treat rent as equivalent to debt has significantly lowered the underlying cost of financing. The debt in SLB transactions is primarily priced on the basis of the tenant's credit rather than the real estate. The structure allows much higher leverage than conventional structures (above the traditional 60-75% mortgage debt). In a structure that utilises bondable lease[3], the equity invested is typically 10 % or less of the capital structure, while in traditional structure the equity stake is typically around 25-40 % of the capital structure. The difference in pricing for bondable leases is more a function of underlying debt costs than of real estate matters (Bryan 2003).

Also Fitch Ratings' European Structured Finance group's associate director Richard (2003) suggests that SLB transactions mainly rely on the rental stream from the tenant, as well as the

3 According to Richard (2003), bondable lease is largely equivalent to a corporate bond; the tenant is responsible for all rentals and other costs, rental reviews are upward only, and the obligations of the buyer-lessor remain limited.

value of the underlying property. While Bryan (2003) suggests that the SLB is mainly based on the seller-lessee's credit quality, Richard (2003) continues that the liquidity of the real estate assets is the key factor dictating both the achievable rating level and the amount of debt assessed to be above the rating of the single obligor. He explains that if the underlying property is specialised to the seller-lessee's use, it can prove difficult to identify alternative tenants in the event the property is vacated. This means that the corporate element of the cash flow will prevail and less credit will be assigned to the property element. By contrast, with standardised property in a liquid market with a large potential universe of tenants, greater comfort can be derived from the assumption that the property will be easily re-let.

Many researchers argue that leasing transactions are a form of debt financing. Therefore, the buyer is, in essence, a lender and can be viewed as taking a secured loan [e.g. Myers et al. (1976) and Bowman (1980)]. However, it is important to notice that while a direct lease involves a new asset, an SLB transaction involves an asset the company has previously owned. Furthermore, while leasing involves the acquisition of an asset, an SLB transaction involves the disposal and acquisition of an asset. Ezzel and Vora (2002) demonstrated this difference by showing that SLB transactions and direct leasing have different impacts on shareholders' wealth. The interpretation is that if leasing is not the component adding equity value in an SLB transaction, the value must come from some other source. This other source is obviously the sale of the property. Therefore, to seek the source of the value-enhancing component in SLBs, the formation of the market value of real estate must first be understood.

Jaffe and Sirmans (2001) define the market value of real estate as follows:

> *"Market value represents the present value of the anticipated benefits from the market's perspective. The various investors in the marketplace view the risk-return trade-off and arrive at expectations of the returns and the risks associated with an investment. The expectations are then converted into a value."*

As shown in Equation (1), the value of real estate is the present value of future lease payments to perpetuity. The value of real estate is equal to its capability to create rental streams in the future. The lease payment the seller-lessee pays is income for the buyer-lessor and thus the value of lease can be seen to equal the value of the real estate.

$$\text{Value of Lease} = \text{Value of Property} = C_0 + \frac{C_1}{1+IRR} + \frac{C_2}{(1+IRR)^2} + \ldots + \frac{C_n + \text{RV}_n}{(1+IRR)^n}$$

(1)

where:

C_i = Cash flow in the i^{th} period[4]

IRR= Internal Rate of Return

RV_n= Residual value of the property in the n^{th} period

n= Number of periods

In financial terms, Equation (1) states that the seller-lessee has potential to achieve lower leasing costs and cost of capital if the buyer-lessor can lower its IRR or increase the residual value of the property. As Jaffe and Sirmans (2001) stated, the expectations are converted into value. In this case, the expectations are converted into IRR. This means that if the seller-lessee has good reputation, good credit quality, and good future prospects, the expectations are likely to be more positive and the associated risks are likely to be lower. This is eventually converted into lower required IRR, thereby enhancing the value of the transaction. The lower the possibility that the seller-lessee defaults, the higher the buyer-lessor's comfort level with the seller-lessee is likely to be. In other words, the better the quality of seller-lessee is, the lower the cost of financing, eventually converted into either a higher purchase price or lower lease payments, is. Therefore, it can be suggested that the better the credit quality of seller-lessee is, the better the deal it can make. Eventually, this is converted into higher abnormal returns on shareholders' equity. The assumption is in line with Richard's (2003) and Bryan's (2003) observations that an important component of the SLB is the creditability of the seller-lessee.

As Richard (2003) highlights in his paper, liquidity of the real estate has an important role to play in an SLB. If the property type, quality and location are good and the market liquid with a large potential universe of tenants, greater comfort can be derived from the assumption that the property will be easily re-let. This obviously has a risk reducing effect which is reflected in a lower required IRR. The other important factor that can influence the value is the selection of the right buyer-lessor. The lessor might be specialized in a specific property type, market, or lease term. This means that it might have a higher comfort level if it has better knowledge over the property type and the market. The comfort level is reflected in the buyer-lessor's required IRR.

[4] In this study I assume, for simplicity, that there are no taxes and that the real estate is fully occupied to perpetuity.

As the literature and analysis of several SLBs suggest, the arrangements may differ in many ways depending, among other things, on the value and quality of the underlying asset and the qualifications and needs of both parties. The most important factors (shown in Figure 2) that affect to the buyer-lessor's required IRR are its comfort level with the seller-lessee and the property-specific variables, as well as the buyer-lessor's cost of funds. When both parties can agree on the same IRR, the deal specific variables are tailored to fit the needs of both parties involved. These deal-specific variables, such as the net yield, annual adjustments, length of lease, purchase price, and options are set so that they are in balance with the required IRR.

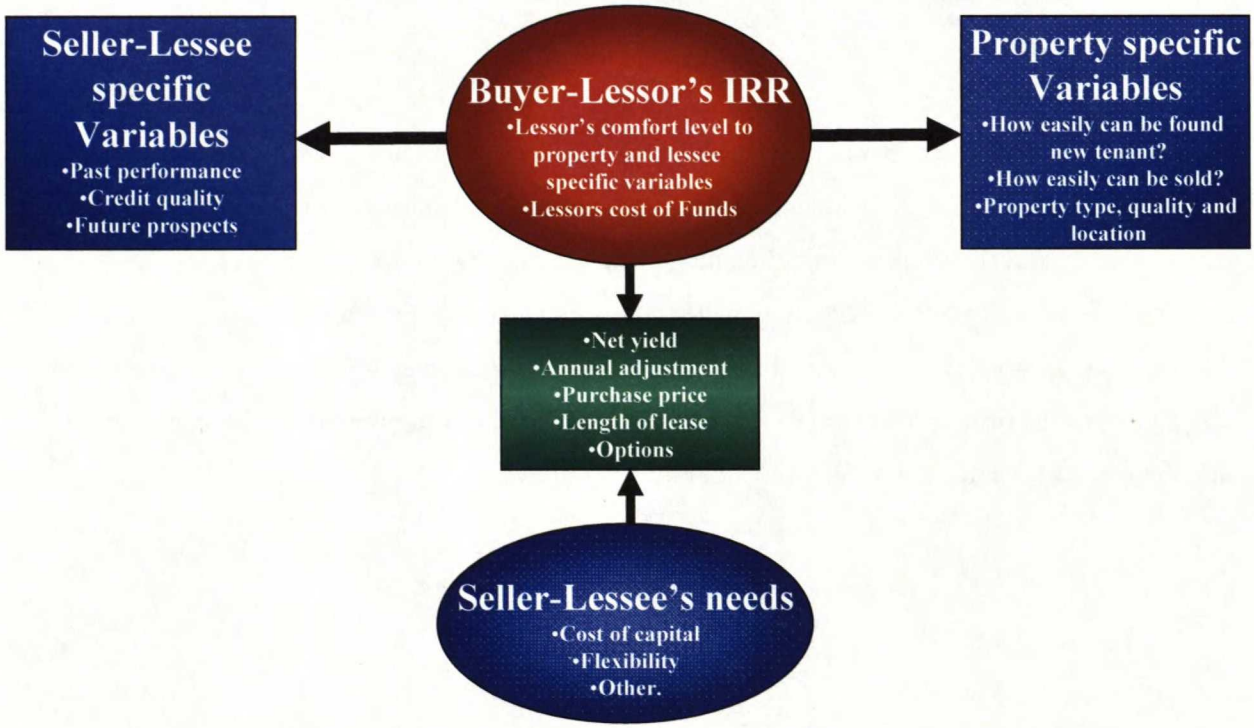

Figure 2. ***The main components of SLB price setting.***

2.2 The Cost of SLB Financing

From the financial point of view, the most important question is how to measure the cost of SLB financing. As I pointed out in Chapter 2.1, lease valuation models often begin with the assumption that debt and lease are substitutes. However, a corresponding assumption that real estate is 100 % debt financed is evidently unrealistic. This means that when one tries to compare the cost of an SLB, IRR should not be compared to the marginal cost of debt, as has been commonly suggested [e.g. Myers et al. (1976), and Brealey & Myers (2003)]. This is because it is hard to find a lender for a transaction that is 100 % debt-financed. As a result, it becomes nigh impossible to determine the marginal cost of debt. Thus, it should not be said that SLB is a substitute for debt.

What I suggest is that we compare the individual leverage potential of real estate, also called its collateral value. Based on the collateral value it is possible to determine the cost of debt for the collateral part, and then replace the remaining part of financing with the cost of equity. This can be done either by extracting IRR into smaller components and comparing the cost of additional finance over the cost of collateralized debt, or by calculating the weighted average cost of capital (WACC) for the entire 100 % sum of real estate's market value and comparing this to the IRR of the suggested SLB transaction. WACC is defined as follows:

(2) $$WACC = r_d * (1 - Tax\ rate) * (\frac{d}{d+e}) + r_e * (\frac{e}{d+e})$$

where:

r_d= the cost of debt

r_e= the cost of equity or additional finance

d= the amount of debt (collateral value of real estate)

e= the amount needed equity or additional finance

$d+e$= the market value of real estate

The cost of equity or additional finance (r_e) can also be expressed as Equation (3), which shows that the return on equity depends on the capital structure.

(3) $$r_e = WACC + (\frac{d}{e}) * (WACC - r_d * (1 - tax\ \text{rate}))$$

r_e is the figure that can be used to compare the cost of additional finance. Clearly, the properties of both methods are similar and give the same answers. This approach does not change the results of the traditional leasing models. However, it makes the assumptions more realistic and enhances the comparability of different finance solutions.

2.3 Sale and Leaseback Motives

Rodrigues and Sirmans (1996) chose to approach the lease or buy problem cautiously, concluding that "leasing may or may not be the optimal strategy depending on the specific circumstances". The decision on whether to use SLBs or conventional financing involves the weighting of various advantages and disadvantages. The advantages of sale and leaseback deals are very similar to those of basic leasing. However, the size of assets involved is much bigger compared to basic operating and financial leases. The main strategic motives are currently consistently identified because of their contribution to the increase in shareholders' wealth. The basic reasons are:

a) *To raise off-balance sheet funding:* Managers want to release capital from assets to reinvest in core activities, or to make balance sheet and financial ratios look better.

b) *To diversify funding sources:* Sellers may just want to diversify their funding sources. By disposing of the assets, which are then financed in the real estate debt market, the seller hopes to tap into new sources of financing.

c) *To improve efficiency:* Many corporations have a suspicion that their in-house property managers are not the most efficient providers of these services. A sale and leaseback can be a straightforward way to outsource this activity to the best possible service provider able to unlock cost efficiencies and create strategic advantages to the property user.

d) *To enhance occupational efficiency:* A real estate owner-occupier has locked itself into a fixed cost structure. The new owner can rent the free space, thereby decreasing the costs of the lessee.

e) *Disposal of low-yielding assets:* Pressure for capital efficiency forces companies to consider outsourcing their real estate portfolios. Changing the asset from low yielding real estate into more liquid form and reinvesting it into the core business will improve returns.

Holman (1988) points out that the major advantage is that an SLB provides cash. The amount of cash realized in an SLB is greater than the amount realized under conventional financing because the selling price is equivalent to 100 % of the fair market value of the property. For example, in secured lending companies can use approximately 70% of the real estate's market value as its

collateral value. In an SLB the company receives 100% of the real estate's market value, and thus 42.9 % more capital compared to a lending decision. Therefore, one could argue that the additional cash, compared to collateralized lending, is sometimes valuable for a firm. Holman continues that an SLB can also provide significant portions of the funds needed to buy a company in LBO's. On the other hand, the impetus for many hostile takeovers is undervalued assets. Therefore, if the management is trying to avoid a hostile takeover, it might be in the management's interest to liquidate the CRE, thereby taking the generated cash and distributing it to the shareholders, or investing in an expansion program. With the SLB-generated cash a company can maximize its return on assets by freeing up equity for corporate mergers, acquisitions, or for investing in the core business. Holman summarizes shortly that the net result of an SLB is an increase in cash, a decrease in liabilities, and an increase in net worth. What is interesting is that Holman points out that property managers should be conscious of the hidden value of the real estate on their balance sheet while other SLB papers [e.g. Slovin et al. (1990), Ezzel and Vora (2002)] completely omit it.

Weatherhead (1997) highlights the importance of corporate real estate as a resource in corporate strategy. According to him, corporate real estate can assist in expanding the corporation without new equity and without high gearing. He uses the case of the supermarket chain Sainsbury's which has funded its expansion programme from new sources of finance since the 1980s. Its aim is to find a source of funding other than reserves. The easiest funding methods were not suitable: a share issue would have attracted many investors but the Sainsbury family did not want to dilute their interest in the business and, therefore, rejected it. The steady but rapid growth in the sales area has been achieved by financing the growth with continuous sale and leaseback arrangements.

The practitioners' literature and press usually indicate that corporations use sale and leasebacks usually in financial distress. This means that they expect that reason for SLB is that company has run out of all other sources of debt. This is said to be beneficial if it decreases the probability of bankruptcy.

There are also several disadvantages to SLB transactions. I shall mention only the most typical ones here. Firstly, if the SLB is not properly structured, it will be treated as a "capital lease" and

will appear as a liability on the balance sheet[5]. This means that the seller-lessee no longer has any fixed asset or liability on its balance sheet but is still responsible for most of the operating expenses and significant lease expenses. Secondly, SLBs are taxable on their gains: realized book profits will be taxed and, as a result, the company does not get the full market value. Taxation may motivate companies to postpone accounting profits, prefer lower lease payments instead of a higher purchase price, and to manipulate earnings so that taxable income can be minimized. Tax planning may lead to a decrease in earnings and in ROA in the event year. Thirdly, any increase in property values accrues to the buyer-lessor, as suggested by Holman (1988). In calculating the return on investment, the buyer-lessor and the seller-lessee will estimate the residual value. The seller-lessee assumes the risk that the actual residual value will be more than the estimated residual value. Commensurate with this assumption of risk, the seller-lessee will have a higher return on investment if residual values exceed actual residual values. The fourth disadvantage is that an SLB might sometimes decrease flexibility, especially if a company has not aligned its property, finance, and business strategies to support the common goal. When it comes to flexibility, tying the company with long-term contracts to wrong kinds of buildings in wrong locations, based on wrong or biased expectations about the company's future, might turn out to be excessively expensive (Woollam, 2003).

[5] IFRS 17 states the conditions under which leases are treated as capital leases. The conditions are highly related to US GAAP.

3 STUDIES RELATED TO THE SLB FRAMEWORK

In this chapter I present the literature concerning SLB transactions. First, Chapter 3.1 describes the characteristics behind shareholders' wealth. Chapter 3.1 exhibits earlier studies about leasing and the value of the firm. Chapter 3.2 presents the effects of real estate on the firm value. Chapter 3.3 discusses hidden values, such as latent assets and hidden reserves. Chapter 3.4 rounds up the literature on corporate financing decisions and asymmetric information. Chapter 3.5 presents the literature on financial distress. Chapter 3.6 illustrates the concept of the tax savings hypothesis. Chapter 3.7 shows earlier studies about corporate focus. Finally, Chapter 3.8 demonstrates what Vijh (2002) found out about the use of proceeds among equity carve-outs.

3.1 Shareholders' Wealth

The purpose of a company is to create wealth to its owners, shareholders, and a common measure of shareholders' wealth is the value of its equity. From the shareholders' point of view this means that to make sure that the company fulfils its purpose, managers should make their decisions based on their effect on shareholders' wealth, i.e. by maximizing the value of the equity.

Value Based Management (VBM) is a management approach, originally introduced by Kontes et al. (1994), that aims to ensure that companies are consistently run on value. It provides a solution aligning the managements' and shareholders' views to deliver cost savings, increase efficiency and maintain constant growth. VBM does not guarantee that all management's decisions are wise, but it should improve the quality of decision-making.

The institutional value drivers of VBM are built on five key processes: governance, strategic planning, resource allocation, performance management, and top management compensation. The principle of shareholders' wealth, according to Kontes et al. (1994), is defined as:

> *"Managing to maximize shareholder value means generating, choosing, and implementing the best alternatives for any business strategy or organizational issue."*

Because the interests of shareholders and managers are usually conflicting, researchers have discussed the importance of VBM as a tool to minimize agency problems such overinvestment, reduced effort, and risk avoiding. To make sure that the interests of the management are also in the interest of the shareholders, i.e. to minimize the agency problem, enhanced monitoring and giving right incentives to align the different views have been proposed. EVA[6] and the residual income model are some of the proposed measures of shareholders wealth (Kontes et al. 1994).

The Residual Income and Shareholders' Wealth

The discounted residual income approach, referred to as the EBO (Edwards-Bell-Ohlson) valuation model, is often associated with the theoretical work of Ohlson (1991, 1995) and Feltham and Ohlson (1995). Lee (1994) showed that the EBO model can be linked directly to EVA because they both measure residual incomes. Furthermore, it must be noted that EBO equation is identical to the dividend discount model (Bernard 1994, Lee and Myers 1999) which makes it academically valid as an equity valuation model even if it expresses the firm value in terms of accounting numbers. Independent derivations of this valuation approach have been introduced throughout accounting, finance and economics literature since the 1930s. More recent approaches to empirical implementation of the model are discussed in several papers [e.g., Bernard (1994), Abarbanell and Bernard (1995), Frankel and Lee (1997, 1998), and Dechow et al. (1997)].

In a series of papers, Ohlson (1990, 1991, 1995) demonstrates that, as long as the firm's earnings and book value are forecast in line with "clean surplus" accounting, the present value of the firm's expected future dividends (based on all currently available information) defined as stock's intrinsic value can be rewritten as the reported book value, plus the sum of discounted residual income to perpetuity.

The Clean surplus equation is written as:

(4) $$B_t = B_{t-1} + NI_t - DIV_t$$

where

B_t= book value in period t

NI_t=net income in period t

DIV_t = dividends of period t

[6] Economic Value Added" (EVA) is a registered trademark of Stern Stewart & CO. It is widely used to measure the shareholder's wealth and to align the interests of shareholders and managers.

The Intrinsic Value (V_t) is calculated as the present value of the firm's expected future dividends:

(5) $$V_t = \sum_{i=1}^{\infty} \frac{E_t(D_{t+1})}{(1+r_e)^i}$$

where
$E_t(D_{t+1})$ = expected dividends for the next period (t+1)
r_e =cost of equity capital

The formula can also be written as the reported book value plus an infinite sum of discounted residual incomes:

(6) $$V_t = \sum_{i=1}^{\infty} \frac{E_t[(ROE_{t+1} - r_e) \times B_{t+i-1}]}{(1+r_e)^i} = \sum_{i=1}^{\infty} \frac{E_t[(NI_{t+1} - (r_e \times B_{t+i-1})]}{(1+r_e)^i}$$

where
E_t= expected information
ROE_{t+1}= the after-tax return on book equity for period (t+1)

It is widely acknowledged that the discounted residual income model relies on the same theory, and is subject to the same theoretical limitations, as the dividend discount model. However, there are some practical considerations that make this model easier to implement. The model provides a framework for thinking about the relation between accounting and firm values. The equation divides the firm value into two components: the capital invested (B_t) and the present value of future residual income (the infinite sum). It is important to note that a firm that always earns an income exactly equal to its cost of equity has a zero infinite component. In such a case, V_t=B_t, and P/B (Market-to-Book) ratio is 1. However, if the company has a ROE higher than its cost of equity, its firm value is greater than its book value, and vice versa (Lee and Myers 1999).

Equation (6) shows that there are three ways to enhance shareholders' wealth:

1. By increasing earnings while keeping capital and risks unaffected (increase growth or improve profit margin).
2. By reducing the amount of capital employed while keeping the earnings and risks unaffected.
3. By decreasing the cost of equity while keeping capital and earnings unaffected (decrease risks).

The model takes into account the capital tied in the company. An advantage of the EBO method is that the terminal value is generally much smaller than in the DCF analyses. Discounted cash flow and earnings based models are also criticized for typically ignoring much of the information within a balance sheet, such as massive real estate holdings. The DCF, therefore, pushes a larger portion of the firm value to later periods of the forecast. As a result, DCF valuations tend to suffer from problems associated with terminal value estimations and miss the valuation of the company's assets. Lee (1996) argues that these terminal values are higher and more volatile than they need to be because a large portion of projected cash flow relates to the current capital base. He also suggests that in the EBO model exceptional items, such as changes in asset values, should be included in book values. By doing so, the assets will be associated with their current market value, which, in turn, is in line with what IFRS suggests.

In general, the EBO model and the VBM approach suggest that the shareholders' wealth can be maximized when the value of both assets and future economic profits are maximized. The current value of assets can be maximized by releasing the value of real estates, the book values of which significantly differs from their market values. This can be done either by revaluating the assets on the balance sheet or by disposing of the real estate and converting it into a more liquid form, i.e. cash. The revaluation, in turn, does not alter the potential future earnings stream but would only decrease the economic profits. Selling the assets, on the other hand, will allow the management either to redeploy the cash in the core business, or to pay back invested capital. The value of the business can be maximized by maximizing the present value of future economic profits. This suggests the disposal of assets that yield less than the company's expected rate of return either to decrease the capital tied in operations (repay invested capital) or for redeployment in a better-yielding core business.

In essence, the EBO model suggests that an SLB might offer two advantages that potentially increase the shareholders' wealth: it enables the maximization of current asset values by releasing the hidden value of the company's real estate, allowing the maximization of future economic profits (the value of business) by the disposal of low-yielding assets, and allowing the redeployment of the cash in a core business that yields better.

3.2 Leasing and Firm Value

Many researchers have suggested that the benefits of an SLB transaction are similar to a direct lease. However, while under a sale and leaseback agreement a company sells an existing asset, a real estate it owns, to another party, a direct lease involves the acquisition of a new asset. In finance, it is a widely accepted notion that leasing is a substitute for debt. For example, Myers et al. (1976) assumes that lease payments are fixed obligations like other loans, displacing debt and reducing debt capacity. However, it should be noticed that a lease agreement is, in theory, exactly similar to debt only when the lessor is responsible for the asset-related risks and asset management duties in spite of the lease agreement. Such leasing structures are usually referred to as synthetic lease structures. The main purpose of synthetic leases has traditionally been just to take the asset off the books, not to alter the real production process. However, current development of accounting principles both in the U.S. and in Europe leads toward a situation in which the use of off-balance sheet finance (such as synthetic leases) becomes more difficult.

If the lease of an asset is viewed as a form of collateralized external financing (strict financial leases are perfect substitutes for debt), it should generate non-positive returns on equity (Stulz and Johnson, 1985). Miller and Upton (1976) argue that symmetry between lease or buy (financed with debt) is not the way rentals and interest payments are treated for tax purposes, as suggested, but that user firms may not always be able to take full advantage of some of the tax subsidies the government bestows.

Lewellen et al. (1976) argue that, if such gains exist, they are likely to be temporary in a competitive market. They assert that, for leasing arrangements involving unique assets dedicated to specific purposes, potential tax gains are likely to be more than offset by the transactions costs associated with the lease contract. On the other hand, Myers et al. (1976) are more optimistic about the potential for net gains. The empirical implication is that announcements of such transactions can lead to positive valuation effects.

Miller and Upton (1976) analyze the leasing decision using capital budgeting techniques within the framework of a perfect market, concluding that no financial advantage accrues from leasing. From this perspective leasing is a window-dressing activity that generates non-positive net present value. However, Lewellen et al. (1976) and Myers et al. (1976) sought for risk-adjusted advantages to leasing in a world with taxation. The two papers demonstrate that there can be tax

advantages from leasing, with the direction of the tax effect dependent on the specific asset life and relevant depreciation and capitalization rates. Thus, under a feasible set of circumstances, there is potential for gains in valuation for the firms involved.

In general, previous theoretical work generates conflicting views on the valuation effects of leasing. A major disagreement in the academic literature is whether leasing can alter the market value of a firm. Logically, a market valuation effect at the announcement of an SLB can occur in a competitive market only if the circumstances of the lessor and the lessee differ in some way, since real production activities are unaffected. Although other motives for such transactions are cited in the practitioners' literature, previous academic work focuses on the value-enhancement potential of differences in the applicable tax rates of lessees and lessors (Smith and Wakeman, 1985).

When the analysis is taken outside the perfect market where the new owner takes responsibility of property-related residual risks and/or property management related tasks, the situation is not that simple. According to Lewis and Schallheim (1992), debt and leases are complements rather than straight substitutes. They argue that leasing is a mechanism for selling tax deductions; therefore it can motivate the lessee firm to increase the proportion of debt in its capital structure relative to an otherwise identical firm that does not lease. They also show that a competitive lessor will use diversification to reduce risk and increase utilization of tax deductions so that it can lower its lease payments. Therefore, I expect that the lessor holds diversified portfolios of leased assets and can offer lease payments under equivalent loan. Based on this, we can also suggest that SLBs are the preferred financing method compared to straight debt.

3.3 Real Estate and Firm Performance

3.3.1 What is Real Estate?

Real estate is the main fixed asset found on most corporate balance sheets and presents one of the largest expenses within an organization. Nonetheless, real estate is often narrowly understood as a bunch of bricks and stones. The fact is, however, that real estate presents nearly

70% of Finnish national wealth[7] and, thereby, comprises one of our largest resources enabling wealth creation. Even then, real estate has several other meanings depending on the point of view.

Real estate investors often think that real estate is all about investment and return on investment, and for this reason they are determined to get cash flow. For the same reason, a real estate that does not generate cash flow is worthless. In simple terms, real estate assets are future cash flows, and cash is cash, whether it comes from real estate, bonds or stocks. Real estate assets, therefore, compete against stocks and bonds and represent a part of the broader capital markets (Geltner 2002).

Property managers are employed by real estate owners, such as investors. These professional property managers are hired either directly or through third-party management firms. Thus, for a property manager, real estate is a source of income. Property managers are responsible for the day-to-day management of real estate assets. The job of a property manager is to operate real estate assets efficiently and deal with issues related to leasing, construction, tenant relations, and market analysis. A competent manager can save the owner a great deal of money.

For the user company, real estate has traditionally been a necessary burden. Although being characteristically limiting, it can also make an important contribution to business processes by creating functional value. Increasing competition, value based management, and fast-paced innovations have forced companies to cost reductions, downsizing, and outsourcing (Dewulf et al. 2000). In order to obtain maximum value added for the businesses and to contribute to the overall performance, corporate real estate should also be managed as a strategic corporate asset that supports the overall business strategy.

According to Bryan (2003), companies are not good real estate investors. Companies, on average, build and buy real estates when their business growth requires it, not when there is a good investment market. For this reason, they usually make property commitments in a growing economy when prices are firm. On the other hand, companies typically sell real estate when they no longer have business use for the property, therefore suffering a so-called double penalty. First of all, they frequently sell a building after they no longer need it and, therefore, are selling an

[7] www.stat.fi and VTT (http://www.rakennusteollisuus.fi/edunvalvonta/tyosuhde/strategia.pdf) Feb 27, 2005

empty building (no cash flow, no value). Secondly, they frequently sell it when the economy is already down and the prices are low.

Weatherhead (1997) highlights the importance of corporate real estate as a resource in corporate strategy. He asserts that corporate real estate can help in corporate expansion without new equity and without high gearing. The Sainsbury's case, which Weatherhead uses, shows how the corporation funded its expansion programme since 1980s from new sources of finance. The aim was to find a source of funding other than the reserves. The easiest funding methods were not suitable even that a share issue would have attracted many investors. The Sainsbury family did not want to dilute their interest in the business and rejected it. Sainsbury's sustained a steady but rapid growth in the sales area, continued uninterruptedly since the 1980s, by financing the growth with continuous sale and leaseback arrangements.

Laposa and Charlton (2001) compared the differences between European and US corporations. They found out that a partial reason for poorly developed real estate outsourcing in Europe is the lack of recognition of European corporate outsourcing firms in the non-property world. In addition, concepts like shareholder value and value maximization are still not the main objective of many European companies. Many European companies concentrate on improving their operational efficiency instead of trying to increase the efficient use of their capital.

This is in the line with Hitt et al. (1999), whose resource-based model assumes that each company is a collection of unique resources and capabilities that determine the firm strategy. A company can earn above average returns if the firm uses its valuable, rare, non-substitutable resources and capabilities to establish a competitive advantage over its rivals. Real estate seems to be a hidden reserve that can be exploited when most needed. It is relatively easy to argue that companies do not recognize all financial resources as they should. However, the meaning of real estate as a resource is often confused because of the various roles it plays in the economy.

3.3.2 Real Estate Management and Firm Value

Many corporations suspect that their in-house property managers are not the most efficient providers of these services (Louko 2004). Based on Jonge (1996) and Krumm (1999), Louko summarizes seven ways in which the corporate real estate function can contribute to corporate value formation. CRE management can add shareholder value by increasing flexibility, reducing

costs, enhancing risk control, increasing asset values, increasing productivity developing wok place culture or by working for better corporate image (PR and marketing).

Because real estate is often relatively inefficiently managed, there can be good prospects for adding corporate value through efficient cost control. Occupancy costs directly affect the net earnings of the firm and are usually the second largest single expenditure in a corporation after personnel costs. For example, Booth (1999) indicated that a reduction of 2% in occupancy costs could boost the profit margin by nearly 10% even when net sales were kept constant.

According to Krumm (1999) real estate managers have to focus all the time more on the interests of corporate stakeholders. The internal CRE organization must be able to add corporate value more efficiently than external service providers to stay in their jobs. Outsourcing of CER management tasks can be based on the assumption that it is an easy way to rationalize property costs and, at the same time, get additional occupational flexibility. According to Nappi-Choulet (2002), a company has a much clearer picture of its own comparative competencies if it focuses on its core business. It can re-organize its value chains, focus its activities on its most profitable business segments, and enhance the value of its expertise compared to its competitors. Such a strategy allows a company to transfer risks not associated with its core business to a service provider that is best positioned to carry the risks because property is his area of expertise.

The question is: what makes an external real estate professional sometimes better in real estate management than an internal? Outsourcing benefits shareholders only if the outside contractor can carry out the functions more efficiently than internal personnel. At the same time the gains from outsourcing must be large enough to allow the outside service providers to make an adequate profit. The primary sources of possible efficiency gains in outsourcing stem from economies of scale and scope, as well as from reporting improvements (e.g., timely valuations). The management functions that are most likely to be carried out more effectively by internal managers are the more strategic capability levels that also have the greatest impact on the value of corporations (Manning et al. 1997).

Benjamin et al. (1998) were on the same lines, suggesting that a real estate investor's ability to run real estate business better primarily stems from possible economies of scale from managing a large real estate portfolio, possible savings in taxes, possible better access to credit, and

possible comparative advantage in asset acquisition and disposal due to better market knowledge. However, for example Glascock et al. (1989) have suggested that it is only the changes in the management of real estate that can lead to excess value for shareholders in real estate disposals. These outsourcing gains should be large enough to allow the investor to make an adequate profit that offsets any direct costs.

Based on Louko (2004), the abnormal return is supported more by the hypothesis that corporate management is continuously trying to enhance shareholders wealth than the hypothesis that it is usually more appropriate to lease than own property. Corporate real estate manager's opportunities to maximize return on real estate investment are dominated by several factors. Instead of focusing on maximizing real estate investments, or the technical state of properties, the manager should contribute to the corporate business (Krumm 1999).

According to Nappi-Choulet (2002), sale and leaseback is a way to outsource real estate activities to the best possible service provider that can unlock cost efficiencies and create strategic advantages to the property user. Therefore, one major source of possible abnormal returns associated with SLB announcements is likely to come in the form of improved operational and managerial efficiency.

3.3.3 CRE Holdings and Firm Performance

Large-scale SLB deals have a relatively short history in Europe. In the U.S.A., a more specialized real estate market started to develop much earlier. Nappi-Choulet (2002) reports that the share of the value of real estate of total assets is much lower there than in Europe. The ratio of CRE on the balance sheet to total assets is approximately 35–40% in Europe while in the U.S.A. it is approximately 15 %. This might be partly due to the more developed real estate securitization market of the U.S.A. The same study shows that while 70% of European businesses are owner-occupiers, the equivalent figure for US firms is only 30% (Table 1). This indicates that there is room for corporate real estate disposals in Europe. In the U.K, the real estates to assets ratio is around 30–40% and the associated costs are around 16–17% of total costs among large companies (Weatherhead, 1997). This suggests that the higher the company's asset turnover is, the lower the fixed costs relative to total costs.

Table 1. Corporate real estate holdings in the USA and Europe.
Source: Nappi-Choulet, 2002.

	CRE/Assets	CRE on balance sheet/ all CRE
USA	approx. 15 %	approx. 30 %
Europe	approx. 35 - 40 %	approx. 70 %

Property disposals finally started a rapid increase in the late 1990s. At the same time the real estate market also developed in other respects. Nappi-Choulet (2002) argues that the move to outsource large property portfolios goes hand in hand with the more developed property markets. This is in line with Krumm and Linneman (2001), who suggest that the main reasons for the magnitude of large CRE portfolios has been the absence of a well developed commercial real estate market and, therefore, most European companies have had no choice but to own their properties. Ultimately, corporate real estate disposals have grown from under one billion euros in 1997 to almost 16 billion euros in 2001 (see Lapuma, 2003).

Kuruvilla (1994) reported that corporations with less real estate in their balance sheet are traded at higher share prices than are similar companies with more real estate holdings. The inclusion of real estate in a corporate portfolio is associated with a lower return, higher total risk, higher systematic risk, and poorer abnormal return performance.

Cheong and Kim (1997) tested this hypothesis but their results rather suggested that the ratio of real estate holdings does not have an effect on common stock returns. However, they found that the ratio of real estates to total assets was lower for high-debt firms than for low-debt firms, and concluded that the higher the debt ratio is, the larger the loss of growth opportunity. They also concluded that companies with real estate holdings focus more on maximizing real estate values than the value of their core businesses. Sharp and steady increases in real estate prices had negatively affected the firms' investment behaviour, as well as their firm value. Expectations of an increase in real estate prices increased the value of the assets held, but also caused a value loss for the firm through increased potential investment cost of its future growth opportunities.

More recently, Deng and Gyourko (1999) and Seiler et al. (2001) studied the relationship between corporate real estate ownership and firm performance but failed to find any significant results. Brounen and Eichholtz (2004), however, explored corporate real estate ownership internationally with a sample of 4,636 companies from 18 industries and 9 countries. They found

that ownership appeared to be driven by industrial rather than national differences, with corporate real estate ratios ranging between 0.13 for Business Services and 0.63 for Mining Sector. They also discovered a significantly negative relationship between real estate ownership and the firm's systematic risk. Interestingly, stock returns were lowest among firms with the highest real estate ownership levels in each industry. However, the negative relationship between risk-adjusted stock performance and real estate ownership was significant only in the Communications and Business Service sector. They thought that some of the high industry ownership levels might be explained by the different strategic importance of real estate for various industries. Later Bounen and Eichholtz (2004) reported that the real estate ratio had significantly decreased from 0.34 in 1992 to 0.29 in 2000. Overall, real estate ownership appeared to have decreased over time, a fact they concluded to be due to the increasing popularity of lease alternatives. The results also suggested that shareholders did not like companies with massive real estate holdings.

While foreign investors are looking for attractive investment possibilities, in Europe the first objective is to improve operational efficiency. To show what attracts foreign investors to Europe, the market values and property holdings of ten retailers are exhibited in Table 2. The findings suggest that there is little reason for this trend not to continue.

Table 2. Property holdings to market capital ratios among retail companies
Source: Collected by Louko, based on Wainwright & Nappi-Choulet, 2002.

	Company	Property holdings (£m)	Market Capital (£m)	Property holdings-to-Market Capital ratio
1	Save Group	195	27	722,2 %
2	Alldays	77	31	248,4 %
3	House of Fraser	273	134	203,7 %
4	Arcadia Group	352	176	200,0 %
5	Somerfield	819	416	196,9 %
6	Storehouse	412	227	181,5 %
7	MFI Furniture	356	232	153,4 %
8	Safeway (UK)	3080	2020	152,5 %
9	Selfridges	292	354	82,5 %
10	Sainsbury	5000	6200	80,6 %

The most recent study, examining the relationship between CRE and stock performance, is by Liow (2004). He studied a sample of 75 companies, the property holdings of which comprised over 20 % of their total assets. The results suggest that the inclusion of real estate in a corporate portfolio appears to be associated with lower return, higher total risk, higher systematic risk, and

poorer abnormal return performance. He concludes that non-real estate firms own properties for reasons other than just seeking improvement in their stock market performance.

3.4 Hidden Values

While leasing involves a new asset, an SLB involves the selling and leasing back of an asset the company has previously owned. An SLB, therefore, also offers other information about the company than just information on how the company is financed. Items that cannot be seen in the valuations are called latent assets, and items that cannot be seen in financial statements are called hidden reserves. Together they form hidden values that may explain the positive market perception of an SLB announcement.

3.4.1 Latent Assets

Corporate insiders have an informational advantage over investors. Imperfect monitoring of corporations and their managers causes problems of agency and adverse selection excessively studied in economic literature. Brennan (1990) argues that share prices do not always fully reflect the value of the company's assets. The problem of asymmetric information problem in particular is evident in latent assets, the value of which is costly or difficult for the investors at large to determine. He argues that conventional valuation procedures, such as cash flow models, the dividend discount model, and different multiple valuations, are at least partly to blame for the latency and valuation error. The problem with these models is their tenuous relationship with companies' assets. Market prices, however, may follow a conventional but inappropriate procedure of valuing a particular asset, and the reward for using the correct procedure may be small unless others can be persuaded about the superiority of the correct approach. Therefore, Brennan argues that market prices reflect a large element of convention without the presence of a strong tendency for this to be corrected. However, to the extent the assets remain latent or undervalued by the market, there will be an incentive for the management to convert them into cash or run the risk of being acquired by someone else who will. Brennan (1990) suggests that the threat of a takeover forces the management to prove the value of assets, and the only way to prove it is to dispose of them. More precisely, the latency of asset values induces firms to convert them into cash when they are positive and conversely, to postpone realization when they are negative.

Hite et al. (1987) are in line with Brennan and suggest that relatively low-yielding real estate assets may be difficult for the market to reflect accurately in share prices. Ownership will contribute to earnings only by the amount of rent savings and, for example, in the case of a superstore which owns its stores, it may be difficult for the investors to distinguish the part of earnings that is implicitly rental income and should be capitalized at a low rate from the part stemming from grocery sales that should be capitalized at a higher rate. Brennan (1990) suggests that for these reasons those companies, the stock prices of which do not fully reflect the value of their real estate holdings, ought to sell them and lease them back.

Ambrose (1990) reports on the role of real estate in the takeover market. He documents that corporate real estate holdings increase the likelihood of a firm becoming a takeover candidate. Apparently raiders are aware of the hidden values available through the restructuring of badly managed corporate real estate assets.

3.4.2 Hidden Reserves

Woudenberg (2000) shows that there is also another form of hidden value but it can be such that not even managers know about it. Hidden reserves occur when the book value differs from the market value of the building. This idea can be clarified with a matrix that shows the book value and the market value on different axes (figure 3). If the book value and the market value are both high or both low, there is no mismatch and no hidden reserves or costs.

	LOW MARKET VALUE	HIGH MARKET VALUE
LOW BOOK VALUE	NO HIDDEN RESERVE	HIDDEN RESERVE
HIGH BOOK VALUE	HIDDEN COSTS	NO HIDDEN COSTS

Figure 3. ***Valuation matrix (Woudenberg 2000)***

When the market and book value differ, a hidden reserve or cost occurs. Hidden reserve means that, if the building is sold, it will generate more cash than would be expected based on book

value. In the case of hidden cost, on the other hand, less cash is received compared to book value, and a loss is implied.

Financial Times (2003) reports that retailers from Safeway to Selfridges have historically wanted to own their properties to ensure that they retain control over the sites but are now finding that such a strategy has made them takeover targets. Safeway, the supermarket chain that became the target of a bidding war at the beginning of 2003, indicates that executives and analysts have not yet discovered these hidden values. To fend off bidders that were interested in the company for its real estate, the supermarket chain had its property revalued in the middle of the takeover war by DTZ, at the suggestion of HSBC. After re-valuation Safeway said the group was worth nearly £4bn. This was shortly after the board had accepted a bid from the rival supermarket group William Morrison for £2.9bn. It is understandable that this only served to confuse the shareholders (Financial Times, 2003).

Corporate managers rarely know about the hidden values, a fact which might reflect the low managerial priority of real estate. It is important to notice that general accounting principles have helped in the development of hidden values. The Going Concern principle expects companies to continue their operations and, therefore, there is no sense in valuing real estates to their market value, as they would be when sold. This general procedure has been involved in the creation of massive hidden reserves in the assets of companies.

Because asset valuation processes take time as well as money, property companies that have this expertise are in a superior position in looking for businesses that own undervalued or underdeveloped property, and will target them if they think they can get better value from the real estate than its current owner (Brennan 1990).

3.5 Corporate Financing Decisions

3.5.1 Asymmetric Information

Asymmetric information refers to market information that certain economic parties have but others do not. The conventional neo-classical economics literature normally assumes a perfect

market and equally distributed symmetric market information across parties. Akerlof (1970), however, has demonstrated that asymmetrical allocation of information affects economic trade.

Uncertainty over quality can cause a market failure. In the used cars market buyers have difficulties in verifying the quality of the cars they intend to buy, whereas the previous owners have developed perfect understanding of the actual quality of the cars. However, owners of good quality cars cannot reliably transfer their quality information to the buyers because owners of 'lemons', or cars of lower quality, will also claim their cars to be of good quality since they know that it is impossible for the buyers to differentiate good cars from the bad. Since all rational sellers claim their cars to be of good quality, the equilibrium price should be uniform across the market. However, because informational asymmetries prevent buyers from distinguishing the 'lemons', buyers require a discount that offsets their risk of adverse selection based on the average quality of cars in the market. At that price, however, sellers would be willing to place only 'lemons' for sale. This makes the market collapse: the result is a complete market failure, in which no transactions take place at any price. In addition to the car market, there are several other applications of Akerlof's theory, including insurance, job market, cost of dishonesty, and the credit markets of underdeveloped countries. Akerlof also hypothesised that the theory could explain the existence of several economic institutions counteracting the adverse effects of informational asymmetries, such as guarantees, brand names, enterprise chains, licensing practices, and education (Akerlof, 1970).

3.5.2 Determinants of Corporate Financing Decisions

A number of strong results have been developed from event studies that have examinedthe financing decisions of corporations. When a corporation, e.g., announces that it will raise capital from external markets, there is, on average, a negative abnormal return. The magnitude of this abnormal return depends on the source of external financing. Asquith and Mullins (1986) studied a sample of 266 firms that announced equity issues during 1963–1981, and found out that the two-day average return was -2.7 %. Studying similar announcements with a sample of 80 firms from the period of 1972–1982, Mikkelson and Partch (1986), in turn, found out that the average abnormal return was -3.56 % in their sample.

There is, on the other hand, evidence that the average abnormal return is closer to zero when firms decide to use straight debt financing instead of equity issues. Mikkelson and Partch (1986),

for example, noticed that the average abnormal return for debt issues was -0.23 % for a sample of 171 issues. Findings such as these have provided fuel for development of new theories, contributing to the development of the pecking order theory of financing choices.

3.5.3 Pecking Order of Capital Structure

The pecking order of capital structure theory is among the most influential theories of corporate leverage. According to Myers and Majluf (1984), firms prefer internal to external finance. This is due to adverse selection. When outside funds are necessary, firms prefer debt to equity because of the lower costs associated with debt issues. In their study they show that firms actually seem to favour debt over equity issues. They also believe that asymmetric information about the firm value is a stronger determinant of financing behaviour than asymmetric information. They state that using debt is a better source of financing than equity.

The empirical evidence of the pecking order theory was recently tested by Murray and Goyal (2003). They found some facts that were surprising from the perspective of the pecking order theory: First of all, although external financing was heavily used, debt financing did not dominate equity in magnitude. The greatest support for the pecking order was found among large firms, but seemingly small firms did not follow it. The support of the largest quartile of firms for the pecking order theory declined over time, and equity became important. However, before the turn of the millennium companies were likely to use less debt financing because of the rising stock market. On the other hand, the pecking order theory does not regard leasing as a source of financing. It is interesting that while SLB is regarded as a financing method, it is not included in the financing options of all companies.

3.6 Financial Distress

It is widely believed that corporations usually use SLBs in financial distress. Obviously, SLB is valuable if it helps the company to avoid bankruptcy. Investors know that a levered firm may fall into a situation, in which promises to creditors are broken and cause financial distress. Bankruptcy is a legal mechanism that causes both direct (legal and administrative) and indirect (stakeholder) costs. The cost of distress depends on the probability of distress occurring and decreasing the value of the firm. Even though indirect costs are nearly impossible to measure, they can have a serious impact on company performance (Grinblatt and Titman, 2001).

3.6.1 Cost of Bankruptcy

Ezzel and Vora (2001) argue that a firm can mitigate the expected ex-post costs of bankruptcy by spending resources ex ante on writing contracts that reduce the involvement of the legal system in the event of bankruptcy. Professional fees in the event of a bankruptcy can eat most of the assets of small companies and are particularly large for industrial firms.

Warber (1977) argues that there are significant economies of scale in going bankrupt. Relative to a secured debt, leasing has the potential for reducing the cost of bankruptcy because of the different treatment accorded to leases and secured debts in the event of bankruptcy. In bankruptcy, all actions by secured debt-holders against the firm are temporarily rested. However, lessees in bankruptcy must continue to make lease payments in full, or to the asset, to the lessor. The potential of leasing to reduce the costs of bankruptcy will only be realized for firms that have a low credit quality and consequent greater probability of bankruptcy. Consistent with the bankruptcy prediction, Ezzel and Vora (2001) showed that the gain from an SLB is greater for lessees with low credit quality. This suggests that firms announcing SLBs are able to reduce their expected cost of financial distress. Firms with a low credit quality are able to reduce their overall risks which increase equity values. This finding supports the financial distress hypothesis.

3.6.2 Off-Balance Sheet Funding

Managers may want to release the capital from assets for reinvestment in core activities or to make their balance sheet and financial ratios look better. However, it is naïve to believe that shareholders and debt holders would not understand this. Therefore, in a perfect market, the SLB should not benefit the company in any way.

However, Grinblatt & Titman (2001) hail the importance of the stakeholder theory of capital structure. They stress the significance of non-financial stakeholders, such as customers, employees, suppliers, and the community in which the company operates, that do not have debt or equity in the firm but have a stake in the financial health of the firm. They are interested in the firm's capital structure because of the potential costs they have to bear in the event of financial distress, and are reluctant to do business with a company suffering from financial distress. This creates costs that can deter the company's debt financing even if lenders were willing to provide it with favorable terms. However, non-financial stakeholders are not very likely to look into the company's capital structure as closely as financial stakeholders would, and,

therefore, off-balance sheet financing might benefit the company by partially mitigating these indirect bankruptcy costs.

3.7 Tax Savings Hypothesis

It is obvious that the only rational explanation for leasing is that both the lessee and the lessor benefit from it. Lewellen et al. (1976) and Myers et al. (1976) suggest that leasing creates value by allowing low-tax-rate lessees to transfer valuable depreciation and interest tax deductions to high-tax-rate lessors. The hypothesis also assumes that these tax savings are passed on to the lessee in terms of lower lease payments, thereby reducing costs and increasing profits. The direction of the tax effect depends on the specific asset life, rate of depreciation, tax rate and capitalization rate. Thus the government may suffer a loss in the present value of taxes, simultaneously benefiting the lessee most when:

- The lessor's depreciation is accelerated, or received early on, in the lease period.
- The lessor has the higher tax rate.
- The lease period is long and the lease payments are concentrated on the end of period.
- The lessor has the higher interest rate.
- The lessor has the higher borrowing rate.

If the real estate has been in service for many years, an SLB might generate much larger rental expense deductions for the corporation than its current depreciation deduction. In the latter situation, the corporation would depreciate only the building (not the land) and the amount of the depreciation would be based on its original cost. In an SLB, the rent paid by the company is typically based on the fair market value of both the land and the building, and the deduction, therefore, is usually larger.

Thus, the only savings come in the form of postponed taxes. The later the taxes are paid, the lower their net present value is and the greater the potential for gains in valuation for the firms involved. Empirical evidence supporting the tax savings hypothesis is provided by Ezzel and Vora (2001) who find that the SLB announcement effect is negatively correlated with the lessee's tax rate, i.e., the lower the lessee's tax rate, the greater the return from the sale and leaseback operation. However, they also find that such returns are unrelated to direct leases.

3.8 Corporate Focus

Most of the theoretical arguments regarding corporate focus tend to emphasize the benefits of corporate diversification. Weston (1970) stresses the gains from financial synergy through *resource allocation efficiency* due to the existence of large internal capital markets within diversified firms. This argument indicates that diversified companies should be able to make more positive net present value investments than stand-alone firms in their respective segments.

Lewellen (1971) stated that by combining businesses with *imperfectly correlated earnings streams* companies decrease the risk of default and thereby increase their debt capacity, possibly also enjoying larger interest tax shields. Amihud and Lev (1981) argued that managers themselves benefit from a decreased employment risk due to this coinsurance from the earnings streams.

In the 1980's, both the academic and corporate opinion on the corporate focus changed. Managers went after the benefits of specialization discovered by the academics of the time. Stulz (1990) uses Jensen's (1986) free cash flow argument to point out that diversified firms are more likely to *invest in negative net present value projects* than their independently operating segments. By stressing this drawback of Weston's (1970) internal resource allocation argument, Stulz (1990) and Meyer et al. (1992) predicted that conglomerates were likely to include *negative-value operations* that harm the company and its shareholders.

Myerson (1982) and Harris et al. (1982) focus on the loss of information symmetry between the central management and lower management in diversified firms. Diversification might benefit managers for the wrong reasons, including power and prestige, firm-size related compensation schemes, or because the increase in scope also increases their indispensability. Such agency problems can stimulate managers to diversify the company even if this reduced shareholders' wealth.

These theoretical arguments have nourished a range of empirical studies that analyze the impact of corporate focus on firm value and stock performance. After discussing the existing empirical literature, Montgomery (1994) concluded that most of the outcomes revealed a negative relationship between corporate diversification and stock performance. De (1992) found no cross-sectional correlation between the degree of focus and the excess returns for a sample of Fortune 250 companies for the period 1976–1985. However, when Comment and Jarrell (1994) conducted a similar analysis for a sample of around two thousand NYSE- and ASE-listed firms

during 1978–1989, their results showed that increases in focus were associated with significant rises in stock returns.

Delay et al. (1997) examined cross-industry spin-off distributions and found evidence that spin-offs create value via removing unrelated businesses and allowing the managers to focus on the core operations for which they were best suited. They suggested that value creation is an issue of performance improvement, and found a 3 % improvement in the median ROA between the year -1 and year +1. This change was significant at 5 % level. They also showed that asymmetry costs are higher for diversified conglomerates than for focused and transparent firms creating agency problems that reduce shareholder value. This view is in line with Nappi-Choulet (2002), who argues that outsourcing real estate to professionals gives the management a clearer picture of the company's core business and increases the quality of decisions.

3.9 Use of Proceeds

As I already demonstrated in Chapter 3.1, the use of proceeds may include important information about the management's intentions and the company's future affecting the value of equity. The management's announcement to redeploy the cash back into the company's core business may increase its expected future economic profits just as well as repaying capital to decrease the capital tied in operations.

Financing and refinancing are both central parts of SLB transactions. They relate SLB to carve-outs and asset sales, all of which offer immediate financing for the company. The proceeds of an SLB may be used to repay debt or pay for the company's investment projects. Both the financing strategy hypothesis and the investment strategy hypothesis, as well as previous literature, suggest that raising capital is the primary reason for SLB transactions. However, how the money is used also seems to be important.

The financing strategy hypothesis is based on Lang et al. (1995) and Allen and McConnell (1998), who find that financially distressed parent companies raise capital by asset sales or equity carve-outs, and that the market reacts positively when the proceeds are used to repay debt. Allen and McConnell propose a managerial discretion hypothesis to explain the positive market reaction. They argue that positive announcement period returns arise when financially distressed

companies use carve-out proceeds to pay down debt. They also document that carve-out announcement-period returns are higher if the proceeds are used to repay debt and, therefore, are no longer subject to managerial discretion. However, they do emphasize that their evidence does not explain why carve-outs create value, only that due to agency costs the returns are higher if the cash is removed from the firm.

The investment strategy hypothesis is based on McConnell and Muscarella (1985) who find that the announcement of a capital expenditures plan results in a positive market reaction, and on Mikkelson and Partch (1986) who find that the announcement of an SEO leads to a less negative market reaction if the proceeds are used to finance capital expenditures. According to Schipper and Smith (1986), the important motive for equity carve-outs is the positive use of proceeds by retaining funds within company to finance new projects or to upgrade existing projects.

Vijh (2002) examines the announcement-period returns of a sample of 336 carve-outs completed during the period of 1980–1997 to explore whether the returns are likely to be caused by asymmetric information, or by wealth gains from divestitures. In the paper he finds no support for the asymmetric information hypothesis. However, he does present supporting evidence for returns being explained by divestiture-based advantages. He shows that the refocusing of parent and subsidiary operations, financing of new or existing projects, and reducing the complexity of stock valuation are all divestiture gains explaining the excess returns. Above all, he finds support for both the financing and investment strategy hypotheses.

4 PRIOR RESEARCH

In this chapter I review previous studies of sale and leasebacks and other outsourcing effects. Chapter 4.1 lists all prior SLB effect studies. Chapter 4.2 presents studies of other outsourcing transactions.

4.1 The Sale and Leaseback Effect

The first study of corporate sale-and-leasebacks and shareholders' wealth was made by Slovin et al. (1990). Their sample of 59 SLB announcements in the U.S.A. over the period of 1975–1986 included both real estates and airplanes. Not unlike in this study, the authors manually searched through the Wall Street Journal index, Standard & Poor's Reports, and corporate annual reports for evidence of SLBs of buildings and airplanes. They found no evidence that the firms had suffered financial distress during the three-month period preceding the announcement. They found that the two-day (-1, 0) CAR for a real estate SLB transaction was 0.85% with a *t*-statistic of 1.98, significant at the 5 percent level, while the lessors' wealth remained unaffected. They suggested that, unlike other types of external leasing, the sale-and-leaseback was a value-increasing transaction. They argued that the positive market perception was similar to Lewellen et al. (1976) and Myers et al. (1976), resulting from an overall reduction of the present value of expected taxes included in the transaction. According to these papers, the direction of the tax effect depends on the specific asset life and relevant depreciation and capitalization rates. They argued that, under a feasible set of circumstances, the potential for gains in the valuation of the firms involved was transferred from the government which, in turn, may suffer a loss in the PV of taxes.

Rutherford (1990) also examined the valuation effects of SLB transactions of the CRE on the stock prices of the selling and purchasing firm. Their sample included 42 SLB announcements made by U.S. companies over the period of 1980–1987. The data was obtained by manually searching the Dow Jones News Index and the Wall Street Journal Index. They reported that 14 of the sold properties were company headquarters while the rest of the buildings were hotels, stores, and distribution centers. Consistent with Slovin et al. (1990), they found evidence that the sale and leaseback of the CRE had substantial benefits for the seller-lessee's common stockholders. The AAR for day-1 was 0.88 and significant at the 1 % level. For day 0 the AAR

was 0.71 % at the 10 % level. The most significant gains occurred in the two-day (-1, 0) CAR, which was 1.59 % and significant at the 1% level. Contrary to Slovin et al. (1990), the transaction produced an insignificant loss for the listed corporate lessor-buyer. Rutherford concluded that the advantageous financial transaction for the stockholders of the selling firm was due to two main factors. First, the SLB benefits the stockholders of the selling firm at the expense of its bondholders because the gain results from the sale of the bondholders' collateral (Kim et al., 1978). Second, in line with Slovin et al. (1990), the gains come at the expense of the government as suggested by Lewellen et al. (1976).

Kim et al. (1978) argued theoretically that the SLB should result in a wealth transfer from the selling firm's bondholders to the stockholders[8]. Rutherford (1992) researched the hypothesis with a sample of 71 SLB transactions collected from the Wall Street Journal Index and the Dow Jones News Index. The final sample consisted of 33 announcements made by U.S. firms over the period of 1980–1989. In the sample there were 21 real estate, 7 power plant, and 5 airplane and satellite SLBs. The average selling price was $ 323 million, or 4.1 % of total assets. The day -1 AAR for shareholders was 0.95 % and significant at the 5 % level. However, the Shareholders' AAR for day 0 was -0.27 % and insignificant. The monthly AAR for bondholders was positive 1.41 % but not significant (t-value 1.646)[9]. The results suggested that there was no empirical evidence that bondholders should lose in an SLB transaction even when shareholders gained in the transaction. The positive market perception was likely to have resulted from the decreased PV of expected taxes.

Clarke and Adams (1994) studied the effect of CRE SLB transactions on shareholders' wealth in the UK. The results of their empirical study, presented in a working paper, suggested that the UK capital market reacted negatively to the announcement of a sale and leaseback of a corporate real estate. They believed that the negative market reaction in the UK was due to the financial markets in general interpreting an SLB transaction as a sign of cash flow difficulties for the seller-lessee firm. The paper, however, was never published and, consequently, there is no information on the sample, or the significance of the results.

Alvayay et al. (1995) examined the SLB announcement effect on stock prices and the impact of changes in tax practices (Tax Reform Act 1986, TRA 1986) on shareholders' wealth. They had a

[8] If not prohibited by the terms of existing debt instruments.

[9] The AAR was calculated using the Brown and Warner (1980) market model procedure.

sample of 45 SLBs made by U.S. companies during the period of 1987–1989. There were 19 office building, 9 retail store, 4 hospital, 3 hotel, and 10 other real estate transactions in the sample. Thirteen of the office building transactions involved an SLB of the headquarters. The mean value of the ratio of SLB transactions to total market capital was 28.8%, which they interpreted to mean that the SLB was a significant element of external financing for the lessee. Consistent with previous literature, they found a significant positive market reaction for the seller-lessee. The AAR for day -1 was 0.7 %, significant at the 10% level, and the two-day (-1, 0) CAR was 0.8%, significant at the 2.5% level. However, they also provided empirical evidence that, after the TRA 1986, SLBs of corporate real estate, on average, no longer generated significant wealth gains for the shareholders[10].

Ezzel and Vora (2001) compared sale and leasebacks and direct leases, providing evidence on possible sources of lessee equity value changes in new lease announcements. The sample included 44 SLB announcements and 42 direct lease announcements in the U.S.A. over the period of 1984–1991. They found no statistically significant impact for the announcement of a direct lease. However, for the SLB announcements they found that AAR for day -1 was 1.39 %, and significant at the 5 % level, and for day 0 it was 1.24 %, significant at the 10 % level. The most significant SLB announcement gains occurred over the two-day (-1, 0) CAR. The CAR was 2.63 % and significant at the 1% level. Furthermore, they found evidence that the SLB lessee's tax rate was significantly negatively related to the SLB lessee's AR. That is, the lower the lessee's tax rate, the greater the AR on shareholders wealth. This supports the tax savings hypothesis, suggested by Alvayay (1995) to have been eliminated by the TRA 1986. They also found that value increases were greater for non-dividend-paying lessees than for dividend-paying lessees. They interpreted this finding as evidence for leasing reducing the adverse selection problem occurring when a high information asymmetry firm attempts to raise capital. They also found that in sale and leasebacks equity values increase more for firms with low interest coverage ratios, while in direct leases equity values increase more for firms with high interest coverage ratios. In sale and leasebacks they found support for their financial distress hypothesis, suggesting that firms announcing leases are able to reduce their expected cost of financial distress.

[10] These results are consistent with Sanger et al. (1990), who studied the effects of the 1976 and 1986 tax reform acts on the risks and returns of real estate investment trusts in the U.S.A.

Devaney and Lizieri (2004) analyzed eight structured SLB transactions in the UK and their impact on the corporate value. As the number of observations suggests, they found no evidence of a common impact. Even though they had only modest and conflicting data to support their arguments, they suggested that capital market impacts are highly dependent on the particular nature of the deal, its effect on capital structure, and the proposed use of the cash.

Table 3. Summary of previous sale and leaseback studies over the period 1990–2004.

Author(s)	Journal (year)	Abnormal return (interval)	Significance level	Sample period and size	Sample size	Country	Summary
Slovin et al.	Journal of Finance (1990)	0.85 % (-1,0)	5 %	1975-1986 59	59	USA	The positive SLB announcement impact is a result from a reduction in the PV of expected taxes.
Rutherford	AREUAE Journal (1990)	1.59 % (-1,0)	1 %	1980-1987	42	USA	The positive market perception is either due to wealth transfer from bondholders or they come at the expense of government.
Rutherford	Review of Financial Economics (1992)	0.95 % (-1) 0.27% (0)	5 % insignificant	1980-1989	33	USA	Bondholders do not lose in transaction. Positive impact is likely result of reduction in the PV of expected taxes.
Clarke and Adams	Working paper, University of Edinburgh (1994)	Negative impact	n.a.	n.a.	n.a.	UK	Market generally interpret SLB as a sign of cash flow difficulties.
Alvayay et al.	Real Estate Economics (1995)	0.7 % (-1,0)	2.5 %	1987-1989	45	USA	Due to TRA 1986, SLB no longer generate positive impacts.
Ezzel and Vora	The Quarterly of Economics and Finance (2001)	2.63 % (-1,0)	1%	1984-1991	44	USA	Abnormal returns were negatively correlated with tax rate and interest coverage.Results supported tax savings and financial distress hypothesis.
Devaney and Lizieri	Journal of Corporate Real Estate (2004)	n.a.	n.a.	1999-2001	8	UK	Impact depends on capital structure and the proposed usage of the cash.

Previous SLB event studies are summarised in Table 3, which presents the authors and journal, the publishing years, the significance level of results, the time period, sample size, country, and the suggested explanations that possibly may have caused the event reaction. Nearly all studies seem to suggest that the impact results from a reduction in expected taxes.

4.2 Other CRE Outsourcing Announcements

Rutherford and Nourse (1988) showed that the formation of a separate real estate unit was generally associated with positive gains to shareholders. The reasons for forming separate real estate units generally include improving cost control, enhancing income generation, releasing suspected undervaluation of real estate, some special characteristics of real estate, risk reduction, and the possible achievement of tax savings.

In addition to studies of corporate real estate SLBs and shareholder wealth, at least Hite et al. (1984) and Ball et al. (1993) have noticed that by spinning off corporate real estate corporations could can in a similar fashion gain abnormal returns for their shareholders. Spin-off stands for the formation of a subsidiary to own and control the parent company's real estate. The newly created shares of the subsidiary are then distributed to the original stockholders, and the subsidiary is left to operate independently. In the case of operational corporate real estate, a spin-off would mean an arrangement very close to a sale and leaseback. According to John (1993), spin-offs increase shareholder wealth by reducing agency costs and increasing the value of tax-shields. Rodriquez and Sirmans (1996) suggest that in corporate real estate sell-offs and spin-offs the value increase is consistent with the hypothesis that firm values increase when information regarding real estate asset values is provided to the market.

Furthermore, at least Allen et al. (1993) have been able to show some evidence of the lessee firm accruing positive abnormal returns in decisions to lease corporate real estate. There is also some evidence that corporations with fewer real estate holdings on their balance sheet do trade at higher share prices than similar companies with more real estate holdings (Kuruvilla 1994).

Empirical evidence, therefore, seems to speak convincingly against corporate real estate ownership. Nevertheless, as Brounen and Eichholtz (2004) have stated, even though these event studies all indicate that stockholders appreciate management efforts to actively restructure their business real estate, this does not at the same time prove that real estate ownership harms a firm's stock performance in general. These studies only analyse specific events in which the

management has stepped in in order to improve the business. The events may have been preceded by situations in which inefficiencies have been extremely high and may, therefore, not be related to real estate ownership in the course of events.

This notion of Brounen and Eichholtz (2004) is supported by Rutherford and Nourse (1988), who showed that only the formation of a separate corporate real estate unit is, in general, associated with positive gains to shareholders. Based on Rutherford and Nourse (1988), the largest gains appear to be associated with publicly traded subsidiaries and the second largest gains with the master limited partnerships and wholly owned subsidiaries.

Brounen and Eichholtz (2004) interpret the event studies as shareholders' appreciation for the management's efforts to restructure their business real estate. However, they indicate that this does not mean that all real estate ownerships harm stockholders. Although they suggest that the events may have been preceded by situations in which inefficiencies have occurred, they thought of them more as a consequence of signals for a change in the general quality of management. On the other hand, these studies do support a trend towards corporate leases, which can stimulate real estate securitization which, in turn, will increase the demand for commercial real estate leases, supplied institutional investors, and specialized real estate companies.

5 HYPOTHESES OF THE STUDY

Previous studies on SLB announcement effects have not examined the factors that determine the abnormal returns in SLB transactions. The purpose of this study is to find empirical evidence on the effect different financial and deal-specific factors have on abnormal returns to shareholders' wealth. The testable hypotheses are based on the pre-existing theoretical framework presented in Chapters 2 and 3. The common set of these hypotheses is that the sale and leaseback can increase the lessee's equity value only by increasing profits, decreasing risks, or by decreasing the capital tied in operations while keeping operations unchanged.

5.1 The SLB Effect Hypothesis

SLB effect

As previous studies in Chapter 4.1 demonstrated, the SLB announcement, on average, has a positive impact on shareholders' wealth. This is, however, against the widely accepted notion in finance that leasing is a substitute for debt. Still, in this study I expect to find similar results. Therefore,

H0 *A sale and leaseback announcement has, on average, a positive impact on shareholders' wealth.*

5.2 Impact on financial ratios hypotheses

SLB is commonly stated to be used to improve financial ratios such as liquidity, leverage ratios, return on assets, and asset turnover. It is, therefore, more than justified to test how SLB transactions, on average, alter companies' financial ratios.

Return on assets

Return on assets (ROA) is a performance measure that indicates in percentage how much profit the company makes over its total assets. An SLB is argued to improve ROA because it either decreases the assets or increases the profits. I, therefore, assume that:

H1 *A sale and leaseback transaction has, on average, a positive impact on ROA.*

Asset turnover

Asset turnover should increase if the company decreases the amount of assets tied in the company. This is the case when the company repays debt or delivers the cash to its shareholders. Therefore, I suggest that

H2 *A sale and leaseback transaction has, on average, a positive impact on Asset turnover.*

Liquidity

SLBs are suggested to be used to improve liquidity and thereby to decrease the risk of financial distress. In an SLB, real estate assets are converted into cash which is a part of current assets. The increase in the amount of cash decreases net debts should, therefore, improve current ratio. As a result, I suggest that:

H3 *A sale and leaseback transaction has, on average, a positive impact on current ratio.*

Real estate holdings

SLB decreases the amount of real estates tied in the company's assets. Therefore, an SLB should be related to decreased buildings to assets ratios and buildings to PPE ratios.

H4 *A sale and leaseback transaction has, on average, a negative impact on real estate to assets ratios.*

Equity to total capital

It has been suggested that an SLB should be understood as debt and, therefore, SLB transactions should increase the leverage ratios of companies. An SLB is also regarded as a financial tool that is used by companies in financial distress. Therefore, I hypothesize that:

H5 *A sale and leaseback transaction has, on average, a negative impact on equity-to-total capital ratios.*

5.3 Multivariate Regression Hypotheses

In this chapter I present the hypotheses concerning the multivariate regression analysis later presented in Chapter 7.3. The hypotheses are divided into two groups depending whether the variable is classified as a deal-specific variable or as a financial variable.

5.3.1 Deal-Specific Hypotheses

Latent Assets

It is obvious that the transaction price contains information about the deal and its consequences. To measure this, I incorporate the TransactionValue-to-MarketCapital (TV/MCAP) ratio. It works as a proxy for the significance of the transaction. If a positive impact is found regardless of the TV/MCAP ratio, the market reaction is likely to have followed from a change in the management's interests toward shareholders' wealth, or from reduced information asymmetry between the management and shareholders. On the other hand, if the market reaction is related to the TV/MCAP ratio, the result supports Brennan's (1990) latent assets hypothesis. According to Brennan, share prices do not fully reflect the value of latent assets because they are difficult to assess by shareholders at large. Therefore, when this information is revealed to the market, the market reacts to the level of TV/MCAP ratio. Therefore, I hypothesize that:

H6 *The TV/MCAP has, on average, a positive relationship with abnormal returns.*

Hidden Reserves

As Brennan (1990) suggests, the majority of the market cannot observe the value of real estates used in the daily operations of corporations, and cannot identify their contribution to the profit. For this reason the market consensus is biased, and those who do know the real value of the company cannot take advantage of it. When a book profit is revealed, market consensus should adjust toward the true value. I, therefore suggest that companies that do make a book profit and deliver this information to the market are associated with higher abnormal returns. The hypothesis is tested in two ways. First, the book profit is announced to the market by management. Second, the market must calculate the book profit by itself. For simplicity, the

second assumption is tested using transactions in which TV/book buildings ratios are over 100 percent. Therefore, the main hypothesis is:

H7 *Book profit has, on average, a positive impact on abnormal returns.*

Use of funds

Also the use of the proceeds contains valuable information. As I showed in Chapter 2.3, the only way to increase the value of a firm is to increase its future earnings, or decrease its overall risk. For this reason, I expect that the use of proceeds may lead to some kind of a market reaction. The financing strategy hypothesis presented in Chapter 3.8 suggests that the market reacts positively when the proceeds are used to repay debt. On the other hand, the investment strategy hypothesis suggests that an announcement of retaining the funds within the company to finance new projects, or upgrade existing ones, results in a positive market reaction. Therefore, the testable hypotheses are:

H8 *Using the proceeds to repay debt has, on average, a positive impact on abnormal returns.*

H9 *Retaining the proceeds in the core business for growth has, on average, a positive impact on abnormal returns.*

5.3.2 Hypotheses about the Financial State

Financial distress

It is a common impression that companies usually enter into SLB as their last resort in financial distress. This view has led to the hypothesis that an SLB is most advantageous for firms that are suffering from financial distress. Obviously, an SLB is valuable if it helps the company to avoid bankruptcy. The concept of financial distress can be divided into long-term and short-term financial distress. I shall use the equity-to-total-capital ratio as a proxy for long-term financial distress. According to this hypothesis, an SLB operation is valuable if it decreases the probability of bankruptcy. I, therefore, hypothesize that companies suffering from financial distress have higher abnormal returns than do companies in better financial position. Prior literature, however, also states that the worse the financial situation is, the more likely it is that the company will make an unfavorable deal. This is also supported by the SLB framework, which

suggests that the lessor/buyer evaluates the lessee/seller's financial state, including its credit quality. Therefore, the null hypothesis for financial distress is:

H10 *The equity-to-total-capital ratio has, on average, a negative impact on abnormal returns.*

Short-term financial distress comes in the form of poor liquidity. Short-term financial slack is measured using current ratio. Poor liquidity increases the likelihood of having to pass positive NPV projects and restricts growth. Hence, short-term liquidity is likely to be valuable for the firm and can be expected to have a negative relation with abnormal returns. The null hypothesis, therefore, is as follows:

H11 *The current ratio has, on average, a negative impact on abnormal returns.*

The company's interest rate is expected to work as a proxy of its credit rating. The higher the company's interest rate is, the more likely it is to have a lower credit rating and a higher cost of debt. If the SLB is expected to lower the cost of external financing, a positive relation between the interest rate and abnormal returns should be found. Thus, the null hypothesis is:

H12 *The interest rate has, on average, a positive impact on abnormal returns.*

Return on assets

It has often been argued that an SLB is used to shape the company's balance sheet and improve its financial ratios, such as the return on assets (ROA) ratio. The potential increase in earnings has a higher percentage impact on low ROA ratios than on high ROA ratios. This suggests that the impact on shareholders' wealth is likely to be higher for firms that have lower ROA ratios than for firms that have higher ROA.. The null hypothesis for the return on assets ratio, therefore, is:

H13 *The ROA has, on average, a negative impact on abnormal returns.*

Asset turnover

It is not a new notion that the Turnover-to-Assets ratio measures the company's efficiency of using its assets, and that it is an indicator of the company's competitive constraints, product differentiation, and cost leadership. A company with a high asset turnover can better take

advantage of its improved profit margin than a company with a lower asset turnover. An increase in the profit margin through cost reduction or improved efficiency leads to higher profitability and future earnings for firms that have high asset turnovers than for firms with low asset turnovers. Therefore, the null hypothesis for asset turnover is:

H14 *The asset turnover has, on average, a positive impact on abnormal returns.*

Market-to-Book ratio

It is well known that the market-to-book ratio plays a prominent role in corporate financing decisions. According to the pecking order theory, financial slack (liquid assets or reserve borrowing power) is valuable (Myers, 1984). Favorable equity valuations, either due to low adverse selection costs or misvaluation, clearly provide firms with opportunities to issue equity and retain financial flexibility. Fama and French (2002) also argue that the pecking order theory can predict a negative relationship between the current leverage ratio and future growth opportunities. If a company is expected to earn less than its expected rate of return, the market-to-book ratio is below one (Current ratio <1) and if it is expected to earn more than its expected return, the ratio is over one (1< Current ratio). Higher market-to-book ratios are related to more favorable equity valuations and thus also to better future growth opportunities. The testable hypothesis is whether an SLB can create valuable financial slack for companies with lower market-to-book ratios. I expect to find a relation between abnormal returns and market-to-book ratios, therefore constructing the null hypothesis as:

H15 *Market-to-book ratio has, on average, a negative impact on abnormal returns.*

Tax savings hypothesis

The tax savings hypothesis predicts that an SLB can create value by allowing low-tax-rate lessees to transfer valuable depreciation and interest tax deductions to high-tax-rate lessors. I define the lessee's tax rate as taxes paid divided by the operating income (TAX) of the firm in the year prior to the occurrence of the event[11]. The prediction is that abnormal returns are negatively related to the TAX variable. The null hypothesis, therefore, is:

[11] This ratio is frequently used in the literature as a measure of tax rate [e.g. Ezzel and Vora (2001), and Kaplan (1989)].

H16 *The tax rate has, on average, a negative impact on abnormal returns.*

Buildings-to-assets

Denis et al.(1997) and many other researchers suggest that information asymmetry costs are higher for diversified conglomerates than for focused and transparent firms. Delay et al. (1997) found evidence that spin-offs create value by removing unrelated businesses and allowing managers to focus on their core operations, for which they are best suited. The studies suggest that value creation is an issue of performance improvement. This view is in line with Nappi-Choulet (2002), who argues that outsourcing real estates to professionals gives the management a clearer picture of the company's core business and improves the quality of decisions. It can, therefore, be expect that companies with high buildings-to-assets ratios generate abnormal returns when they announce a reduction in the level of real estate holdings. The hypothesis for buildings-to-assets ratio is:

H17 *The buildings-to-assets ratio has, on average, a positive impact on abnormal returns.*

6 DATA AND METHODOLOGY

In this chapter I present the data and methodology used. The results are later presented in Chapter 7. Chapter 6.1 first presents the data and the data description. Chapter 6.2 then presents the methodology used.

6.1 Data and Sample Description

6.1.1 Data

The sample consists of 150 announcements made by any publicly listed non-real estate firm in Western Europe during the six-year period between January 1st 1998 and December 31st 2003. The beginning of the period is mainly determined by the short history of sale and leaseback transactions in Europe and the limitations of the announcement news databases.

There is no database of sale and leasebacks available, so the full sample of announcements had to be sought and handpicked manually. The transactions were collected from various sources, including company websites, the Reuters' Factiva database, and from companies' press releases from stock exchanges. Furthermore, the announcements were searched from various publicly available sources, including industry magazines, Internet archives, and search facilities.

According to the study, there were almost 150 announcements in Western Europe, but some of the companies were not listed and, as a result, had to be excluded from the study. If the announcement was made by a subsidiary of a publicly listed company, it was included and the impact measured from the parent's index. The sample is partly biased to international companies and to stock exchanges offering searchable press releases in English. In addition, companies that were less willing to communicate their transactions openly were less likely to be included in the sample. This is the case especially for companies from the Southern Europe in which the tradition of open and transparent communication to all market participants has not yet been established. However, this bias in the search process should not systematically bias the results in any way. Once the announcement had been detected, more detailed information was collected from firm-specific press release archives whenever possible.

The sample excluded those cases in which the corporate assets sold had not been previously owned and used by the lessee company. Moreover, those cases in which the SLB deal did not concern major corporate real estates, such as office buildings, production facilities, or related structures in which the firm leases back the space involved, were also excluded. For the empirical analysis, the announcements had to meet some further criteria. First of all, there should not have been any other major contemporaneous announcements during the event window. Secondly, the source must have stated the specific announcement day. Thirdly, the value of the transaction, as well as the details of the firm and the transaction, had to be available. Finally, the company had to be listed at least 261 days prior to the event. These additional criteria narrowed the final sample to 125 announcements by 91 companies.

The stock return data has been calculated from the daily total return indices obtained from the Datastream database. All stock returns are measured as logarithmic differences in the total return index. Market returns are measured using the companies' local MSCI market index in euros.[12] To obtain the excess returns, one-month Euribor interest rate was used for calculating the risk-free continuously compounded return.[13]

Information from financial statements was gathered from the ThomsonOneAnalytics database. Because of delistings, mergers, and acquisitions, there was available data for just 96 announcements by 71 companies. Even then the data was not full and some figures were missing.

6.1.2 Descriptive statistics of the SLB sample

Countries

The final event-study sample includes 125 announcements by companies listed in eleven (11) different countries and in eleven (11) different stock exchanges. Most of the announcements (circa 54 percent) are made by companies listed in the London Stock Exchange (67 announcements). This is in the line with the analysis of the European association of Investors in Non-listed Real Estate Vehicles (INREV 2004) [14]database, which shows that over half of all

[12] The total return daily MSCI-indices were not available for use. Therefore, I was forced to use the MSCI's price indices.
[13] See Vaihekoski (2004) for more details.
[14] www.inrev.org (15.08.2004)

European non-listed real estate funds are located and operate in the UK. The rest of the announcements come from Sweden (18 announcements, 14 percent), France (11 announcements, 9 percent), Finland (8 announcement, 6 percent), Switzerland (6 announcement, 5 percent), Italy (3 announcement, 2 percent), Germany (3 announcement, 2 percent), Norway (3 announcement, 2 percent), Belgium (2 announcement, 2 percent), Denmark (2 announcement, 2 percent), and Ireland (2 announcement, 2 percent). The distribution is illustrated in Figure 4.

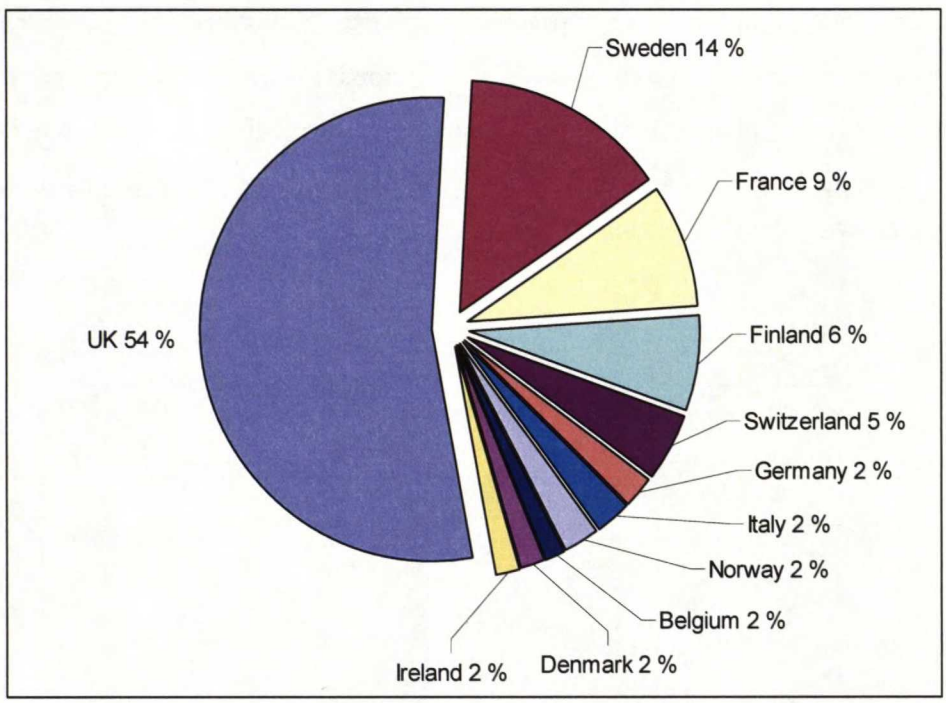

Figure 4. ***The distribution of SLB announcements by country.***

Distribution over the years 1998–2003

Most of the announcements in the sample are from years 2001–2003. Only three announcements in the sample are from the year 1998. A reason for this can be that the Internet and public electronic databases were still under development in the early years of the sample and, as a result, this data was not as commonly presented in the Internet as nowadays. Another reason for the distortion is that data is usually wiped out from servers after becoming old and obsolete. This is easy to see on company web pages, which usually show data for three to five years backwards only. Even though over 70 % of all observations are collected from the years 2001, 2002, and 2003, this should not bias the overall results.

The values of the transactions are also collected to study the size and economic significance of transactions. If the value is announced as a range (say, between 1,000 and 1,200 million euros), the arithmetic average of the range (1.1 billion euros) is used. If the value is given in excess form (say, more than 150 million euros), the lower limit (0.15 billion euros) is used. In the end, there are 124 announcements in which the transaction value is included. If the value is given in some other currency than euro, it is later converted into euros using the foreign exchange rate of the announcement day. Year 2001 is known as the end of the bullish stock market. For some reason it seems to have been the most active transaction year in the SLB market measured in terms of both total transaction value and the number of transactions. In the sample 49.83 percent of the total transaction value concentrated to the year 2001 although just 28.00 percent of all transactions were made during that year. The distribution of these announcements and their total transaction values over time are illustrated in Figure 5.

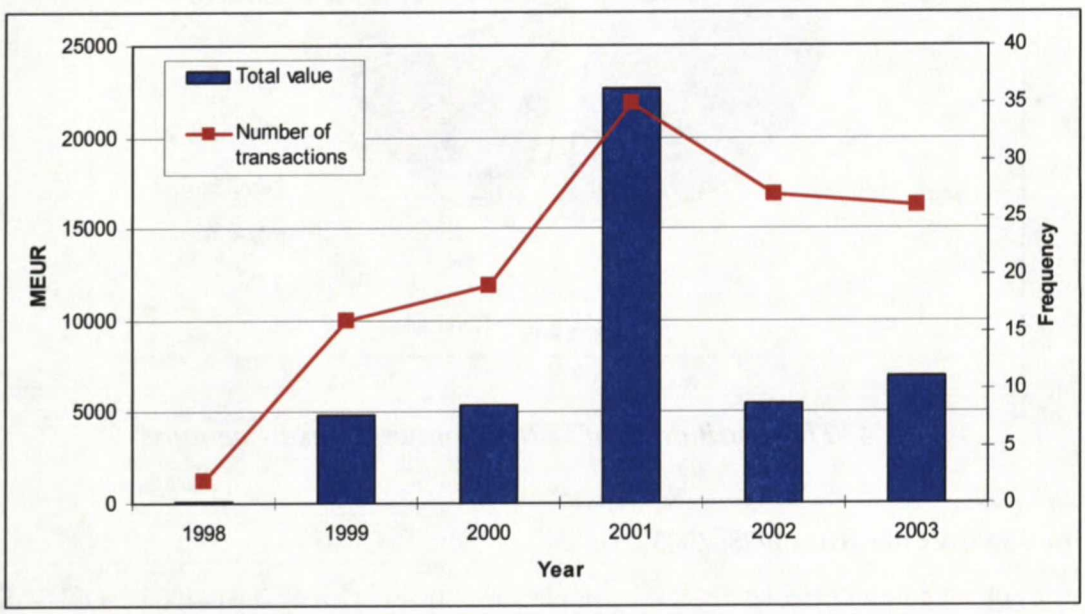

Figure 5. ***Distribution of sale and leaseback announcements over the sample period of 1998 - 2003.***

The mean and median values of the transactions are 365.43 and 59.52 million euros respectively. The standard deviation of transaction values is 917.70 million euros. The total value of all transactions in the sample is 45.7 billion euros. The distribution of transaction values is shown in Figure 6. The minimum value of transactions is € 1.47 million and the maximum value is € 6,072 million.

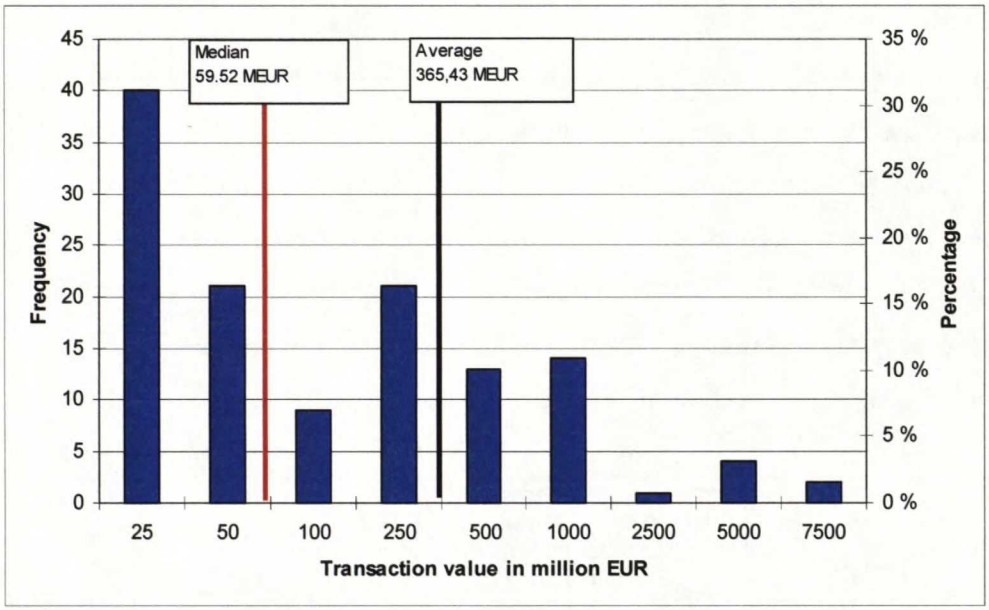

Figure 6. ***Distribution of SLB transaction values***

In order to capture the significance of the deals, the transaction value of the deal is divided by the company's market value at the time of the announcement. If the company's market capitalization is in a currency other than the deal size, they are converted into the same currency by using the foreign exchange rate of the event day. Unfortunately, the data is not complete and, therefore, the ratio could be calculated for 119 companies only. On average, the proportional value of the deals of the firm value was 20.5 percent, with a minimum of 0.016 percent and a maximum of 344.8 percent. The maximum ratio is mainly a consequence of long-term financial distress. The median value is 11.8 percent and the standard deviation is 80.2 percent. The distribution of Transaction Value-to-Market Capital (TV/MCAP) ratios is illustrated in Figure 7.

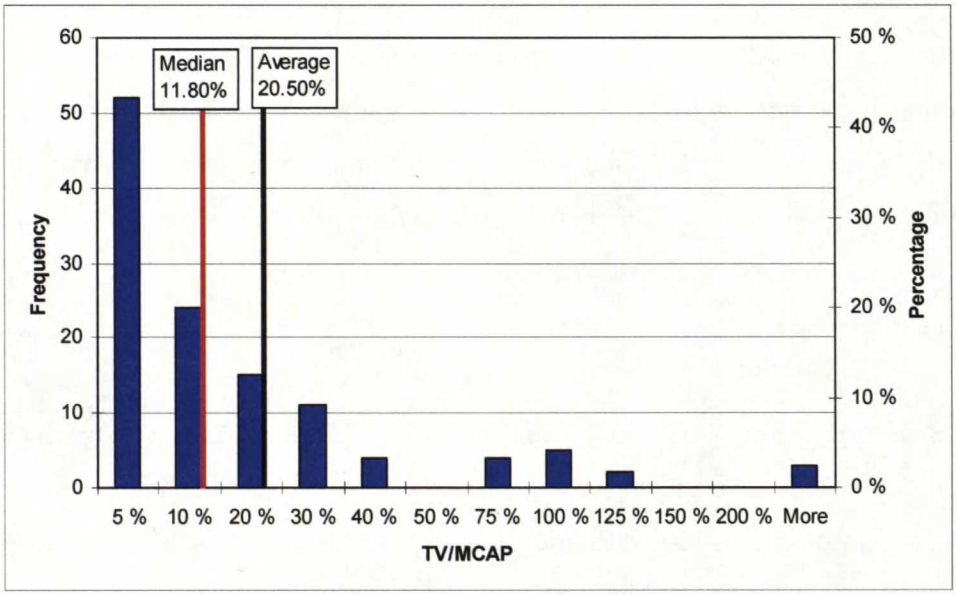

Figure 7. ***Distribution of SLB Transaction Value/MCAP ratios.***

Deal-specific data

The press releases were thoroughly examined to find out how the money was used. In 16 cases the usage of the money was announced: in nine (9) cases it was for core and growth, in six (6) cases to decrease debt, and in one (1) case to decrease capital tied in operations. In eleven cases the book value of sold properties was also announced. In ten out of the eleven cases the companies made book profits. The length of the lease period, on average, is 22.6 years, somewhat longer than in previous studies. The median is 23 years, minimum 7 years, and the maximum 53 years. The distribution of lease lengths is shown in Figure 8.

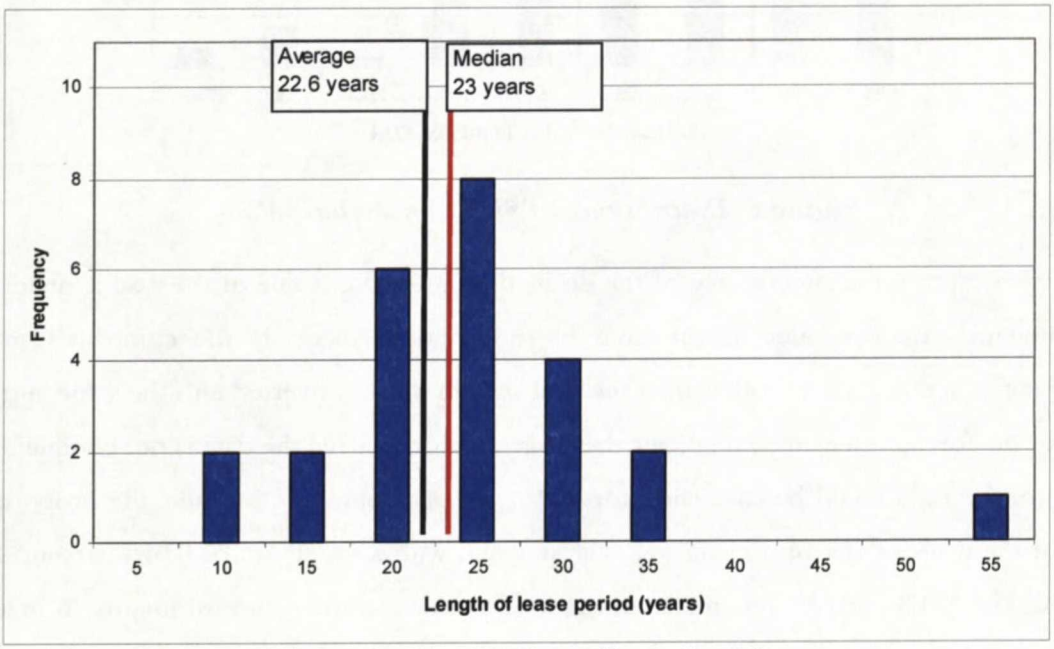

Figure 8. ***Distribution of lease lengths.***

Industries

The industries are manually divided into similar peer groups. The reason for this is that SIC codes do not give accurate enough definitions of the companies' core businesses and, therefore, tend to bias the results. For example, hotel business and news agency business are clearly different categories and they tie different amounts of capital. Therefore, Hilton and Reuters obviously should be set into different categories even if according to the SIC codes they both should be categorised under the services (SIC 7) category.

Seller-lessees mainly come from four industries. The biggest SLB industry is Industrial companies which includes manufacturers and industrial engineering companies (SIC 1, 2, and 3). The second largest industry is the retail and trade industry (SIC 5) which has massive retailing facilities around countries and which has suffered from low profitability. The third most important lessee industry is the Telecom (SIC 48) industry which has suffered financial distress

since the turn of the millennium. Together these three industries dominate over 60 percent of the whole Western European SLB market. The distribution of transactions over different industries is illustrated in Figure 9.

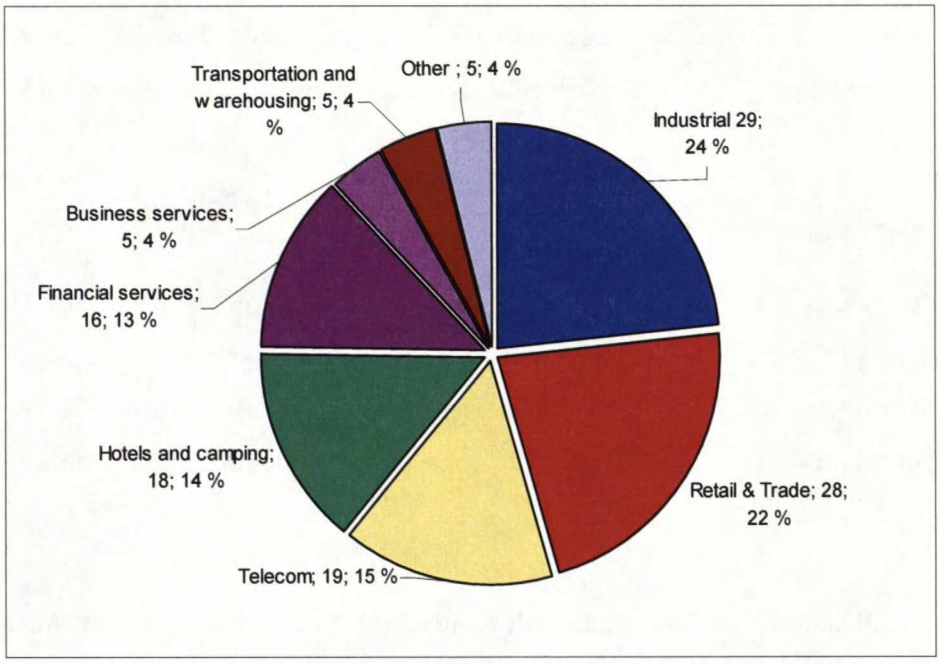

Figure 9. ***Distribution of sale and leaseback transactions over industries during the period of 1998–2003.***

Buyer-Lessors

Other information was also collected. In the announcements the buyer was often clearly indicated. The four biggest buyers in the sample were Nordisk Renting, consortia led by an investment bank (e.g., Goldman Sachs, GE Capital, and Morgan Stanley), London & Regional, and W.P Carey. On the other hand, a number of cases were found from the news databases, in which the buyer announced the deal but the seller was not mentioned. The biggest buyers are listed in Table 4.

Table 4. Biggest buyers in sale and leaseback transactions in Western Europe in 1998–2003.

Buyer	*Frequency*	*Percentage*
Not announced	31	23,85 %
Nordisk Renting	10	7,69 %
Consortium	8	6,15 %
London&Regional	4	3,08 %
W.P.Carey	4	3,08 %
Sum	57	45,60 %
Total number of deals	125	100,00 %

When seller-lessees made more than one transaction during the period 1998-2003, they did not use the same buyer-lessor again. This observation might sound odd if one thinks about the importance and value of durable relationships for investment banks. However, the behaviour supports the hypothesis, presented by Schallheim (1992), that lessors hold diversified portfolios which allow them to manage the associated risks more efficiently. For this reason investment banks might pass otherwise positive NPV SLB transactions on to other investment banks.

Sold real estate portfolios

In the sample all SLB transactions involved the sale of a real estate portfolio. The range of portfolio sizes was as high as 6 698 properties. The largest portfolio, however, consisted of around 6 700 properties and was clearly an outlier. After excluding it, the average portfolio size falls to 81 properties and the median to 19 properties. The minimum is 2 properties and the maximum 473.

The biggest SLB transactions are made with retail & trade properties and with mixed property portfolios. In most cases (34) the portfolio's content is not told. Mixed portfolios are the second largest group with 24 portfolios. The rest of the portfolios consist of single property type portfolios in which the main property type is retail properties (16), office (13), hotels (9), and company headquarters (8). The distribution of different property types is illustrated in Figure 10.

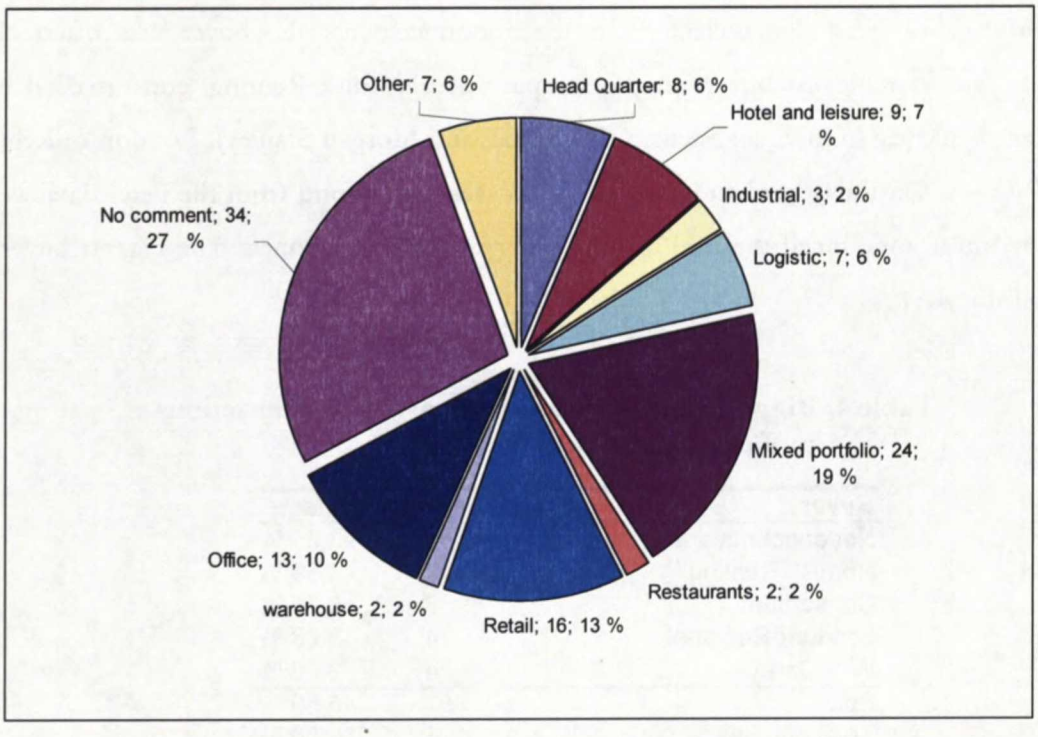

Figure 10. ***Distribution of different property portfolio types.***

6.2 Test Methodology

The analysis first utilizes standard event study methodology to discover the impact of an SLB on the seller-lessee firm's stock price. When a corporation informs the market about its intention to raise external capital, the average result is a negative abnormal return. The magnitude of this abnormal return depends on the source of external financing. Secondly, tests are needed to measure the abnormal and cumulative abnormal returns. Finally, the SLB impact on the companies' financial ratios is measured using tests like the *t*-test for the means and Mann-Whitney U-test for the medians.

6.2.1 Standard Event Study Methodology

To test the hypotheses, I use the standard event study methodology to discover the effect of the SLB announcements on the seller-lessee firm's stock price. To appraise the event's impact, abnormal returns must be first measured. The methodology implicitly assumes that the change in the market value of the security is caused by the event. To get reliable results, it is important to select the right measuring instrument in order to capture the effect of the announcement due to its timing relative to the market trading hours.

Following the previous studies, the event day is defined as $t=0$. The estimation window is specified as $L_1 = T_1 - T_0$. The event window is defined as $L_2 = T_2 - T_1$, and the post-event window as $L_3 = T_3 - T_2$. The timeline is shown in Figure 11.

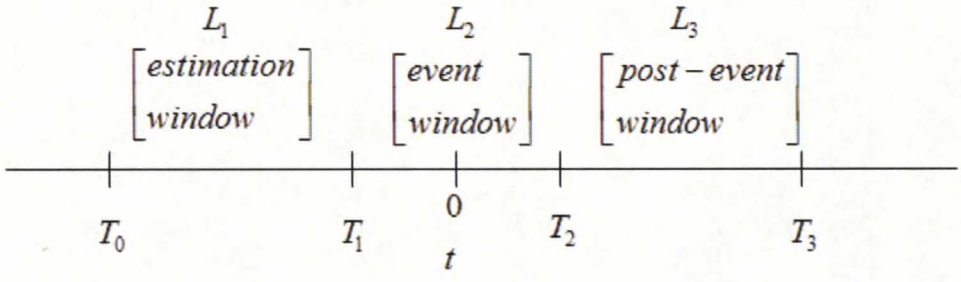

Figure 11. ***Timeline for an event study.***

Following most of the earlier studies, in this study L_1 is set to 250 days (i.e., a calendar year), and L_2 to 21 days. L_3 could be used to study any longer-term effects on the firms.

Measuring abnormal returns

Assuming that the CAPM holds, prediction errors measured around the date of announcement indicate the abnormal return, or the asset-specific announcement effect. CAPM implies the following equation for the abnormal return of asset *i* at time *t*.

(7) $$AR_{it} = r_{it} - \alpha_i + \beta_i r_{mt}$$

where:

AR_{it} = abnormal return on asset *i* at time *t*

r_{it} = excess returns on asset *i* at time *t*

r_{mt} = the market portfolio at time *t*

Alpha and beta are estimated from the market mode using OLS-estimation and the data of the estimation window. Once the abnormal returns have been calculated for all days of the event period and for all assets in the sample, the sample average abnormal return μ_t is calculated for the day *t* in range L_2 as

(8) $$\mu_t = \overline{AR_t} = \frac{1}{N}\sum_{i=1}^{N} AR_{it}$$

The null hypothesis is that the sale and leaseback operation, on average, has no impact on the returns, i.e., $\mu_0 = 0$. The alternative hypothesis H1 states that the sale and leaseback announcement, on average, has a positive impact on the behavior of the returns and serves to increase the value of firm, i.e., $\mu_0 > 0$. The null hypothesis can be tested by with the one-way Student-*t* test statistic

(9) $$\frac{\mu_t}{std(\mu_t)} = t(N)$$

where:

N = the number of events

$std(\mu_t)$, in turn, is the standard deviation of abnormal returns. It is measured using the following equation:

(10) $$std(\mu_t) = \sqrt{\frac{1}{L_1}\sum_{t=T_0}^{T_1}\left(\mu_t - \overline{\mu_t}\right)^2}$$

where:

$\overline{\mu_t}$ = time-series average of abnormal returns in the estimation window

A number of earlier studies have focused on two-day abnormal returns, i.e., the sum of μ_t and μ_{t+1}. This approach is supported by the argument that it takes a while for the prices to adjust in order to reflect the new information available. According to Asquith and Mullins (1986), originally the two-day excess return was calculated to capture the news of an announcement published in the newspaper. This is the most commonly used measurement to get comparable results (e.g., Mikkelson and Partch, 1986; Linn and Pinegar, 1985; Eckbo, 1986; Asquith and Mullins, 1986). However, Tapscot (1996) argues that new information technology gives rise to a new kind of economy. He states that the information is transmitted at the speed of light, and that immediacy becomes the key driver and variable in economic activity and business success. The new economy infrastructure provides new information in a digital format instantly to everyone and, as a result, prices should adjust in real time.

In this study, mainly the one-day returns are used as in, e.g., Campbell et al. (1998). The decision is supported by the development of information technology. In the old economy, information was mainly conveyed through the physical (printed) media, and the effects of information were slower. Nowadays, the flow of information is faster in the pre-event day and also the possible effects can be expected to show up faster in asset prices. For comparison, however, event returns are also calculated for these two days as well as for all other periods prior to and post event.

Aggregation of abnormal returns

Cumulative abnormal return, abbreviated as *CAR*, is the sum of all excess returns over the time period of interest. The cumulative abnormal return captures the total firm-specific stock movement for the whole period during which the market might respond to new information. Typically, the cumulative average abnormal return is calculated also for periods prior to the event and post-event but within the event window in order to study the effects in more detail, especially how fast the information is assimilated into the prices.

The cumulative average abnormal return is calculated using the following equation:

$$\overline{CAR}(\tau_1,\tau_2)=\frac{1}{N}\sum_{i=1}^{N}CAR_i(\tau_1,\tau_2) \quad (11)$$

where:

τ_1 = the beginning of the period of interest

τ_2 = the end of the period of interest.

6.2.2 Student's *t*-test Assuming Unequal Variances

To test whether two sample means are statistically equal I use the following analysis tool that performs a two-sample student's *t*-test. It assumes that the variances of both ranges of data are unequal. The test, therefore, can be referred as a heteroscedastic *t*-test. The use of this test is motivated by the assumption that an SLB transaction has, on average, some kind of an impact on some sample means. Shortly put, this test is useful when there is one group before and after the event. The following formula is used to determine the value of the *t*-statistic:

$$t=\frac{\bar{x}-\bar{y}-\Delta 0}{\sqrt{\frac{S_1^2}{n_1}+\frac{S_2^2}{n_2}}} \quad (12)$$

Where:

n_1 = number of observations before the event

n_2 = number of observations after the event

$\bar{x}$ = before event sample mean

$\bar{y}$ = after event sample mean

S_1^2 = before event sample variance

S_1^2 = after event sample variance

The degrees of freedom (*df*) are determined as follows:

$$df=\frac{\left(\frac{S_1^2}{n_1}+\frac{S_2^2}{n_2}\right)}{\frac{\left(S_1^2/n_1\right)^2}{n_1-1}+\frac{\left(S_1^2/n_2\right)}{n_2-1}} \quad (13)$$

6.2.3 Mann-Whitney Test

In addition to the test for the means, I test whether SLBs have influence on the median financial ratios of the companies. To do this I employ the non-parametric Mann-Whitney U-test which tests the statistical difference of medians before and after the transaction. The test is very simple but laborious to perform. The financial ratios are, again, divided into two groups: before the SLB transaction and after the SLB transaction. The Mann-Whitney is calculated using the following equations:

(14)
$$Z = \frac{U - \frac{N_1 N_2}{2}}{\sqrt{\frac{N_1 N_2 (N_1 + N_2 + 1)}{12}}}$$

Where:

N_1 = Number observations in the larger sample

N_2 = Number of observations in the smaller sample

U is defined as:

(15)
$$U = MAX\begin{cases} C \\ N_1 \times N_2 - C \end{cases}$$

Where C is calculated as:

(16)
$$C = N_1 \times N_2 + \frac{N_2 \times (N_1 + 1)}{2} - \sum_{i=1}^{N_2} R_i$$

Where:

R_i = Ranks of the smaller sample

7 EMPIRICAL RESULTS AND ANALYSIS

This chapter begins with Chapter 7.1 in which I show the results of the standard event study performed in Western Europe. Then I demonstrate how the abnormal returns are distributed over different variables. In Chapter 7.2 I demonstrate the financial background of SLB companies and how SLBs affect their financial ratios by comparing the means and medians before and after the transaction. The chapter continues with a discussion on the reasons behind the changes. Chapter 7.3 examines which financial and deal-specific variables are related to abnormal returns. It summarizes the literature part and tests whether the financial background, the use of money, or hidden values have any predicting power over the abnormal results. Chapter 7.4 summarizes the results of preceding chapters.

7.1 Results and Analysis of the Full Sample

This section starts by testing if an SLB has a positive impact on shareholders' wealth in Western Europe like it was demonstrated in Chapter 4.1 to have in the U.S.A. Chapter 7.1.2 digs deeper into the abnormal returns by dividing the sample into three groups according to their TV/MCAP ratios. Chapter 7.1.3 shows descriptive statistics about the distribution of abnormal returns over different industries and variables.

7.1.1 Event-Day Returns

The results show that there is a clear positive average abnormal return at the event day for the seller-lessee firms engaged in sale and leasebacks. The average event day abnormal return is +1.03% when calculated over one day [0,0] event window. It differs significantly from zero at the standard 1% significance level (t-value 3.678 with p-value 0.0003) of the two-tailed test, and is significantly positive (p-value <0.0001). I can, therefore, reject the null hypothesis of no effect and accept H_1 which presumes that sale and leaseback announcements have, on average, a positive impact on the average abnormal returns. This result is in line with several previous studies presented in Chapter 4.1.

The average impacts of sale and leaseback announcements in the sample are exhibited in Table 5. The figures do not show any leakage prior to the announcements. The figures do show,

however, that the CAR increases to over one percent but, surprisingly, starts to decline between 1 and 5 days after the transaction. The figures, on the other hand, do not reveal the origin of this phenomenon. Nonetheless, it can be concluded that, on average, an SLB transaction increases the value of the equity and has a positive impact on shareholders' wealth in Western Europe, as it also does in the U.S.A.

Table 5. Average cumulative abnormal returns

Average cumulative abnormal return is the equally-weighted average of the companies' continuously compounded abnormal returns in the interval specified in the table. The announcement day abnormal return is [0,0]. The *t*-test statistic is given for the two-tailed test of zero average CAR. The 1 percent, 5 percent, and 10 percent significance levels are denoted by ***, **, and *, respectively.

Interval	Average CAR	t-test	p-value
[-10,-1]	-0.00255	-0.908	36,55 %
[-5,-1]	-0.00269	-0.957	34,05 %
[-1,+1]	0.01427	5.080***	0,00 %
[0,0]	0.01033	3.678***	0,03 %
[0,+1]	0.01639	5.835***	0,01 %
[+1,+5]	0.00489	1.740*	8,43 %
[+1,+10]	0.00839	2.985***	0,34 %

In addition to the simple one-day event return, I also calculated the return over the two-day event period to compare the results with Slovin et al. (1990). The average two-day event return is positive, +1.64%, which is in line with but nearly twice as high as the +0.85% of Slovin et al. (1990). The result is also clearly significant (*t*-statistic is 5.835, *p*-value < 0.01 %).

The results suggest that there is no leakage of information prior to the announcement. The average cumulative abnormal return over the interval from ten days to one day prior to the announcement is negative -0.26 % with a *t*-statistic of -0.908, which does not significantly differ from zero (*p*-value = 0.366%). The cumulative abnormal return can also be seen in Figure 12. The results are in line with Slovin et al. (1990).

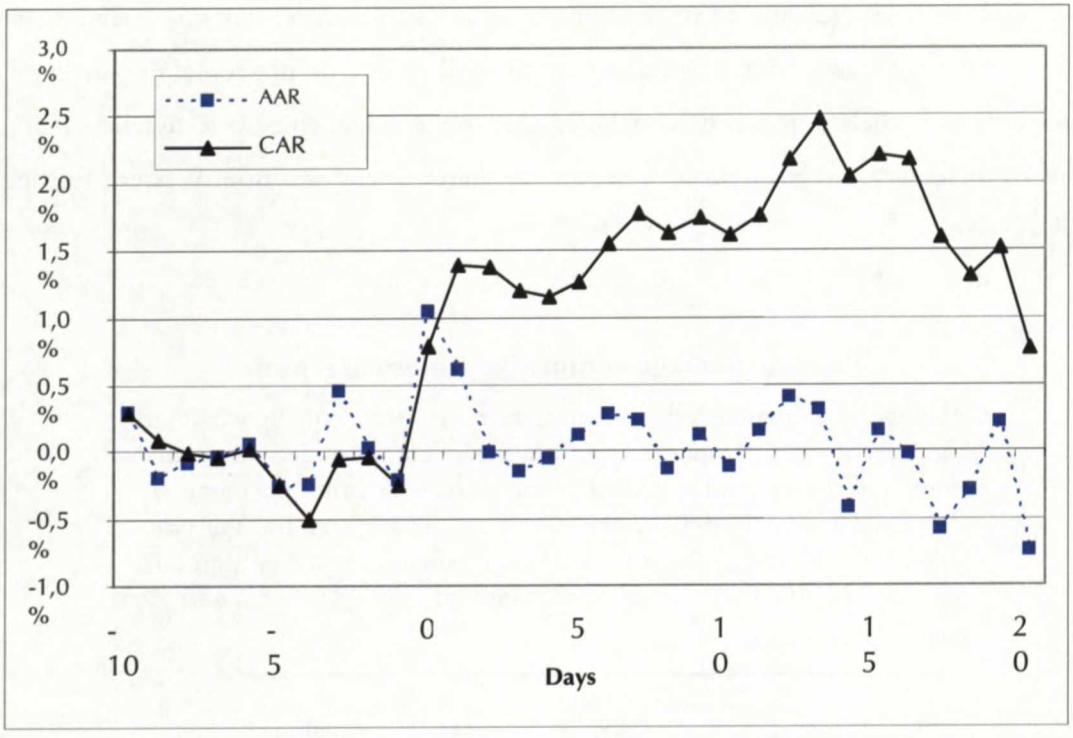

Figure 12. ***Abnormal Returns and Cumulative Abnormal Returns.***

Finding a positive event day return suggests that SLB transactions have a positive effect on the firm's value. This contradicts the empirical results of the issuance of plain vanilla debt. Mikkelson and Partch (1986) report abnormal returns of -0.23 % (*t*-statistic of -1.40) for the announcements of straight debt and abnormal returns of -0.39 % (*t*-statistic of -2.21) for announcements of issues that ultimately are completed. Since the effects of debt issuance are consistently non-positive in the literature, it is surprising to find a positive effect on the announcement of sale and leaseback deals which in principle are comparable to debt arrangements. These deals must, therefore, provide some benefits to the company's cash flows or convey some private information from the management to the market.

The potential increase in the company's value could come from an overall reduction in the present value of expected taxes. It is also suggested that a sale and leaseback is the preferred method of financing compared to debt financing. In addition, announcements may signal the company's higher interest on shareholders' value and the efficient use of capital which could offer one explanation for the difference in reactions to debt and sale-leaseback announcements.

Distribution of abnormal returns and outliers

The 125 event returns [0,0] are widely distributed. The positive returns comprise 57.60 percent of the returns and the remaining 42.40 percent have negative signs. The range is as high as 35.19 percent; the minimum and maximum are -6.71 percent and 28.41 percent, respectively. As can be seen in Figure 13, the distribution of the event returns is concentrated towards positive returns and skewed to the right at the level of 3.52. The highest returns are clearly identified as outliers. When the three highest event returns are excluded from the sample, the average abnormal return drops to 0.61 percent. However, it still differs significantly from zero at the standard 5 percent level (t-value 2.160 with p-value 3.28 percent), and the positive returns still comprise 55.20 percent of the remaining 122 event returns. Thus, there are still 23.21 percent more positive event returns compared to negative returns. This result confirms what I showed before, that SLBs, on average, have a positive impact on shareholders' wealth.

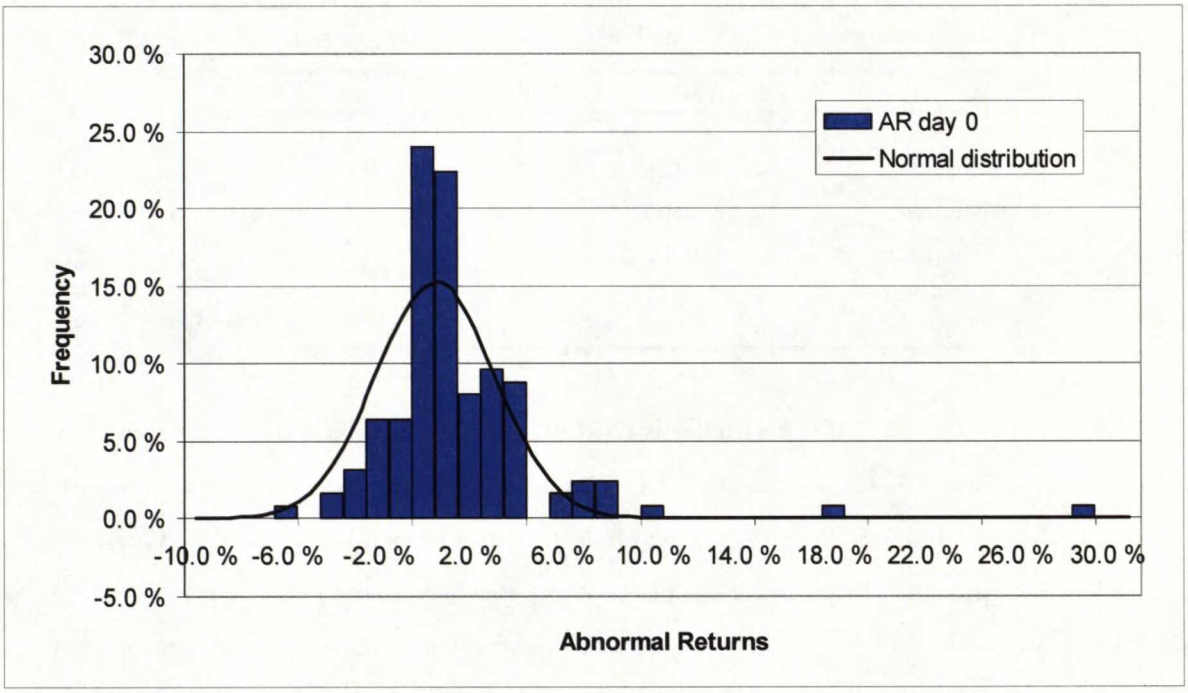

Figure 13. ***Distribution of Abnormal returns.***

7.1.2 Event Returns and TV/MCAP

Considerable differences between price adjustments can be identified by studying the sample averages. This is because one can argue that the deal has no impact on the company's share price unless it is of significant size. The larger the transaction value is compared to the company's market capital, the more significant the impact is likely to be. Therefore, I divide the sample into

three sub-samples on the basis of their TV/MCAP which is denoted as the transaction value[15] divided by the company's current market capital. TV/MCAP values are sorted from the smallest to the largest and then divided into three groups by using the following weights: 0/8–3/8, 3/8–5/8 and 5/8–8/8. These groups are then denoted as Small, Medium and Large, respectively. The descriptive statistics of the three groups are shown in Table 6, which shows that the Large group has a much higher mean Value/MCAP-ratio than the two other groups. This might have at least two different explanations. Firstly, companies may have suffered financial distress and, therefore, the market capital is low, reflecting the company's poor future prospects. Secondly, the current market value does not reflect latent assets, such as real estate assets, that are hard to observe by outsiders.

Table 6. TV/MCAP ratios of different groups

Every group's Value/MCAP is the equally-weighted average of the companies' deal values divided by their current market capital. Value/MCAP values are sorted from the smallest to the largest and divided into the following groups: 0/8–3/8, 3/8 - 5/8 and 5/8 – 8/8 which are denoted as Small, Medium, and Large, respectively.

	Small	Medium	Large
Mean	0,0148	0,0666	0,5161
Median	0,0105	0,0680	0,2489
Minimum	0,0002	0,0426	0,0984
Maximum	0,0411	0,0984	3,4483
Count	45	30	45

The SLB effect of these three sub-samples is illustrated in Figure 14 and the statistics are shown in Table 7. As Figure 14 shows, Group 3 has a significantly different CAR graph compared to groups Small and Medium. Large group exhibits statistically significant average CARs at the standard 1 % significance level for all calculated sub-periods over the event window, except for the [-5,-1] sub- period. However, Small group also has a statistically significant two-day [0,-1] return at the 1 % significance level, while Medium group has a statistically significant one day [0,0] abnormal return at the 5 % significance level. Neither of Groups Small and Medium has a positive average CAR after day [1]. All groups have statistically significant returns over the period [-10,-1] at the 1 % significance level. Normally, statistically significant returns taking place prior to the event are interpreted as an indication of information leakage. However, it seems more logical to assume that the reason for the statistically significant average CARs for each group over the period [-10,-1] can be found in the sub-samples' trend because the average CAR

[15] More generally denoted as purchase price.

periods [-10,-1] and [1, 10] all have the same signs both prior to and post event. While in Groups Small and Medium the sign is negative pre- and post-event, the significance decreases. Similarly, Large group has a statistically positive CAR both prior to and after the announcement but the significance increases. It can, therefore, be concluded that SLBs increase abnormal returns in all groups.

Table 7. Average cumulative abnormal returns

Average cumulative abnormal return is the equally-weighted average of the companies' continuously compounded abnormal returns in the interval specified in the table. The announcement day abnormal return is [0,0]. The *t*-test statistic is given for the two-tailed test of zero average CAR. The 99 percent, 95 percent and 90 percent confidence levels are denoted by ***, ** and *, respectively.

Interval	Average CAR, Small	t-test	p-value	Average CAR, Medium	t-test	p-value	Average CAR, Large	t-test	p-value
[-10,-1]	-1,36 %	-4,825***	0,00 %	-0,85 %	-3,036***	0,49 %	2,06 %	7,341***	0,00 %
[-5,-1]	0,17 %	0,6199	53,84 %	-1,17 %	-4,168***	0,02 %	0,03 %	0,0971	92,30 %
[-1,+1]	-0,10 %	-0,3516	72,68 %	0,03 %	0,1032	91,85 %	1,80 %	6,421***	0,00 %
[0,0]	0,55 %	1,965*	5,56 %	0,70 %	2,490**	1,85 %	1,68 %	5,978***	0,00 %
[0,+1]	0,78 %	2,783***	0,79 %	0,47 %	1,6660	10,61 %	2,49 %	8,851***	0,00 %
[+1,+5]	-0,15 %	-0,5423	59,03 %	-1,25 %	-4,449***	0,01 %	2,18 %	7,745***	0,00 %
[+1,+10]	-0,47 %	-1,6673	10,24 %	-0,79 %	-2,822***	0,84 %	2,52 %	8,983***	0,00 %

The higher the TV/MCAP ratio is, the more significant the impact on average CARs is. This is in support of Brennan's (1990) hypothesis of latent assets. The explanation is based on Brennan's argument that market consensus is based on asymmetric information about the company's assets. The asymmetry develops because the investors at large have difficulties in obtaining information about the assets. As a result, the market consensus is based on the market majority's wrong estimates. But when the SLB and the deal values are announced to the market, the value of the latent assets is transmitted simultaneously to all market participants, resulting in an immediate adjustment to reflect the new market consensus. Contradicting previous studies, the results suggest that the positive market reaction to an SLB announcement comes from the released hidden values.

However, because positive event returns are found in all groups, SLB announcements must contain also contain other information than just the value of company's latent assets. An explanation for this could be, for example, that the announcement contains information about a change in the management's interests, of concentration in the core business, or of a decrease the company's level of diversification. Nevertheless, this is a question that requires more detailed investigation.

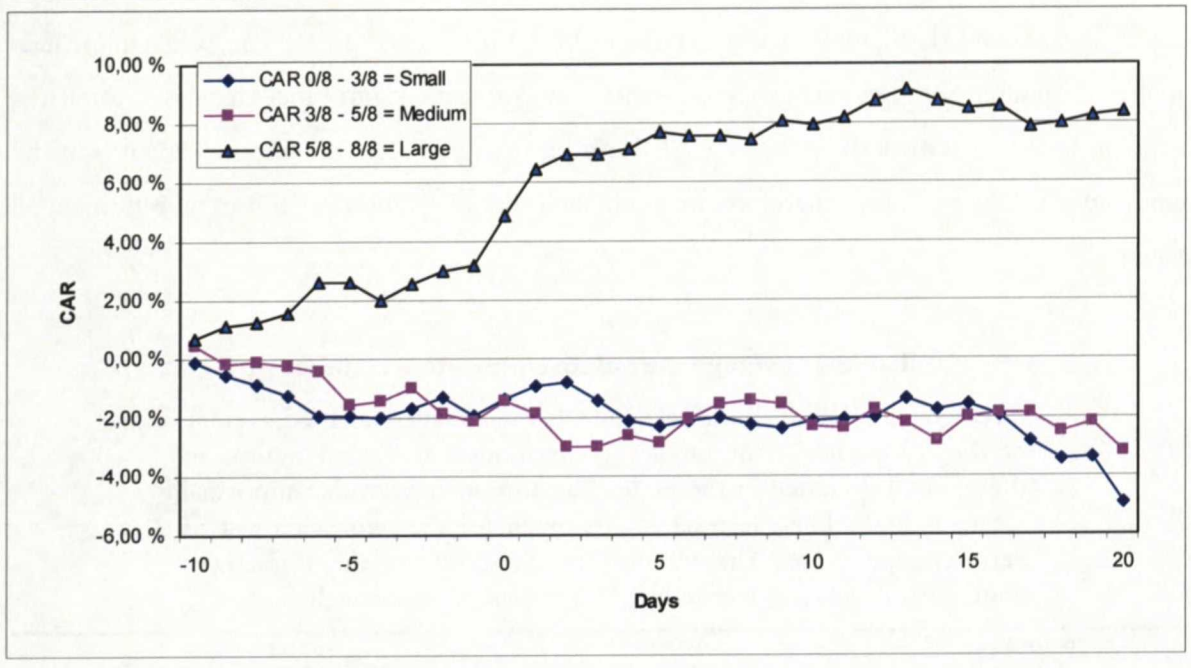

Figure 14. ***Average Cumulative Abnormal Returns in the event window for the three sub-groups.***

Outliers

As is evident in Figure 15, there are no identifiable outliers in the CAR graphs of Group 3. This suggests that the earlier results are somewhat valid, and they are not biased simply because of possible outliers. The standard deviation of 0.170 is calculated over the event window [-10, 20] from the CAR figures of the full sample. The cumulative abnormal return bars illustrated only include the maximum and minimum observations over the event window [0, 20] from Group 3.

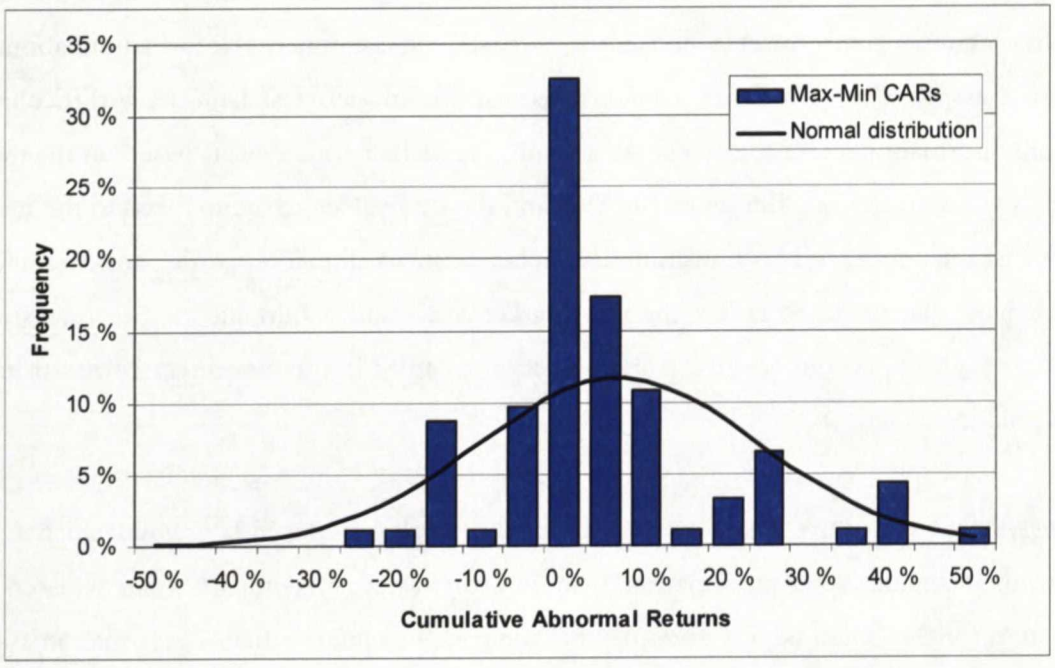

Figure 15. ***Max-Min CAR figures over the post-event window.***
The confidence level is calculated from CAR figures over the event window.

7.1.3 AAR Descriptive Statistics

Also some other information has been gathered from the SLB announcements. It is justifiable, therefore, to illuminate what companies tended to tell in their press releases, and how that information relates to event returns.

Use of Money

The planned use of money can be used to divide abnormal returns into different groups. In nine cases the companies announced that they intended to use the proceeds to support their core business and to build their operations. These announcements were associated with a positive AAR of 2.87 percent. While the lowest return was –2.40 percent, the highest return was 7.14 percent. An intention to decrease debt was announced six times. They also were associated with a positive AAR of 1.44 percent. The highest AR was 3.68 percent and the lowest 0.01 percent. In one case a company announced an intent to distribute the money back to investors. This announcement was associated with a negative impact. The total number of money usage announcements in the sample was 16 and their average AR 2.03 percent. The figures are exhibited in Table 8.

Table 8. Use of money and Abnormal Returns

AR	Core and Growth	Decrease debt	Other
High	7,14 %	3,68 %	
Low	-2,40 %	0,01 %	
average	2,87 %	1,44 %	-2,10 %
Number of announcements	9	6	1
AAR			2,03 %
Total number of observations			16

Book profits/Hidden reserves

Eleven companies announced both the book values and deal values of their sold portfolio. From these values it is possible to calculate the book profit, which is defined as the percent by which the purchase price exceeds the book value of the depreciated asset. The highest book profit in the sample is 54.44 percent and the lowest is -14.29 percent while the average is 26.00 percent. The lowest AR is -3.26 percent and the highest is 28.42 percent while the average AR is 2.55 percent.

Returns by country

Table 9 shows how the SLB announcement returns are distributed between the sample countries. The highest average AR, 2.06 percent, is found in Switzerland and the lowest average AR of -2.02 percent in Ireland. All countries that have a negative average AR only have two observations in their sample. Because of the small sample size, it cannot be said that all deals in these countries destroy value. However, it is interesting to note that Sweden, with 18 transactions, has a negative average AR of -0.37 percent while in all other countries with large samples, e.g., the UK, France, Finland, and Switzerland, the average ARs are positive. The biggest TV/MCAP ratios are found in the UK (34.84 percent), Ireland (12.63 percent), and in Italy (11.58 percent). The smallest value/MCAP ratios are in Belgium (2.49 percent), Switzerland (3.14 percent), and in Norway (3.18 percent). The reason for the UK's higher TV/MCAP ratio may be a more developed real estate market. When the AAR is divided by the TV/MCAP ratio, the resulting ratio can be use to examine how efficiently the transaction price contributes to the share value. The higher the figure is, the better the transaction is reflected in the prices. For example, in France the ratio is 48.21 percent, which means that one outsourced euro increases shareholders' wealth by 0.48 euros. When the cash is released from the real estate, the share returned to the shareholders is approximately proportional with the AAR/(TV/MCAP) ratio.

Table 9. ***Average Abnormal Returns and sample countries***

Country	*N*	%	AAR	TV / MCAP	AAR / (TV/MCAP)
UK	67	54 %	1,37%	34,84%	3,94%
Sweden	18	14 %	-0,37%	5,07%	-7,20%
France	11	9 %	2,06%	4,27%	48,21%
Finland	8	6 %	0,16%	7,55%	2,10%
Switzerland	6	5 %	2,06%	3,14%	65,58%
Germany	3	2 %	1,20%	10,13%	11,86%
Italy	3	2 %	0,14%	11,58%	1,20%
Norway	3	2 %	1,98%	3,18%	62,23%
Belgium	2	2 %	-1,66%	2,49%	-66,62%
Denmark	2	2 %	-0,88%	5,31%	-16,59%
Ireland	2	2 %	-2,02%	12,63%	-15,97%
Sum	125	100 %			

Returns by industry

The highest average ARs are found among telecom companies (2.3 percent), and among industrial companies (1.9 percent). The lowest average AR ratios are found in transportation and warehousing (–0.7 percent) and the retail and trade segment (0.0 percent). The highest TV/MCAP ratios are among business service companies (74.62 percent) and hotel and camping companies (43.5 percent). The SLBs have increased shareholders' wealth most efficiently in the financial services and telecom sectors, in which one outsourced euro distributes 77.24 percent

and 52.67 percent, respectively, to the shareholders. Industry-specific average abnormal returns and TV/MCAP ratios are shown in Table 10.

Table 10. Average Abnormal Returns and Value/MCAP ratios by industry

Industry	N	%	AAR	TV / MCAP	AAR/(TV/MCAP)
Industrial	29	23,2 %	1,9 %	23,3 %	7,97 %
Retail & Trade	28	22,4 %	0,0 %	18,8 %	-0,17 %
Telecom	19	15,2 %	2,3 %	4,4 %	52,67 %
Hotels and camping	18	14,4 %	0,4 %	43,5 %	0,93 %
Financial services	16	12,8 %	1,3 %	1,7 %	77,24 %
Business services	5	4,0 %	1,2 %	74,6 %	1,64 %
Other	5	4,0 %	0,4 %	16,4 %	2,72 %
Transportation and warehousing	5	4,0 %	-0,7 %	11,3 %	-5,86 %
Sum	125	100,0 %			

Average Abnormal Returns over the years 1998 - 2003

The AAR distribution over the sample period is illustrated in Figure 16. It shows how the SLB-related AARs interact with the general market development over the sample period. The sample market index is an arithmetic average calculated from the sample market indices. The AAR appears to be positive when the market is expected to grow, and negative when the market is expected to decline. This suggests that an SLB is considered as a more favourable financing alternative than equity when it is used to finance company growth.

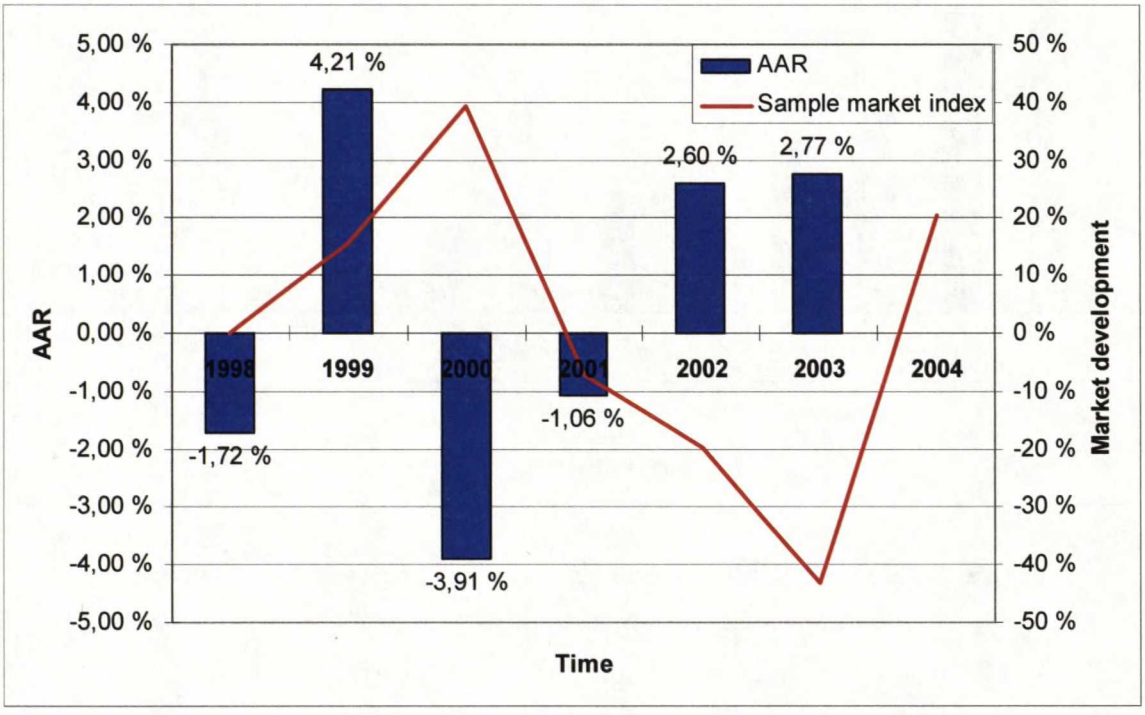

Figure 16. ***AARs and the sample market index over the sample period***

AAR distribution over different real estate portfolios

The question "what kinds of properties can we outsource" is a commonly stated one. Figure 17 shows how the abnormal returns are distributed over different property types. The property type means that the portfolio contains only one type of real estate. Of the sample sizes of over five observations, the mixed portfolio has the highest AAR, 1.79 percent. This is surprising because a large variety of properties should decrease the investors' comfort level with the portfolio. The reason for this kind of behaviour might be that mixed portfolios are significantly larger than single-type portfolios in comparison with the companies' market capital. Thus, the higher TV/MCAP ratios may explain the higher AAR figures. The figure shows also that office, head office, hotel and logistic property portfolios all have clearly positive AARs while retail and special use (other) property portfolios have a negative effect. Groups containing fewer than five observations each cannot even be considered as statistically indicative. For example, it is interesting to note that the three industrial properties have been outsourced with an AAR that is as high as 11.32 percent.

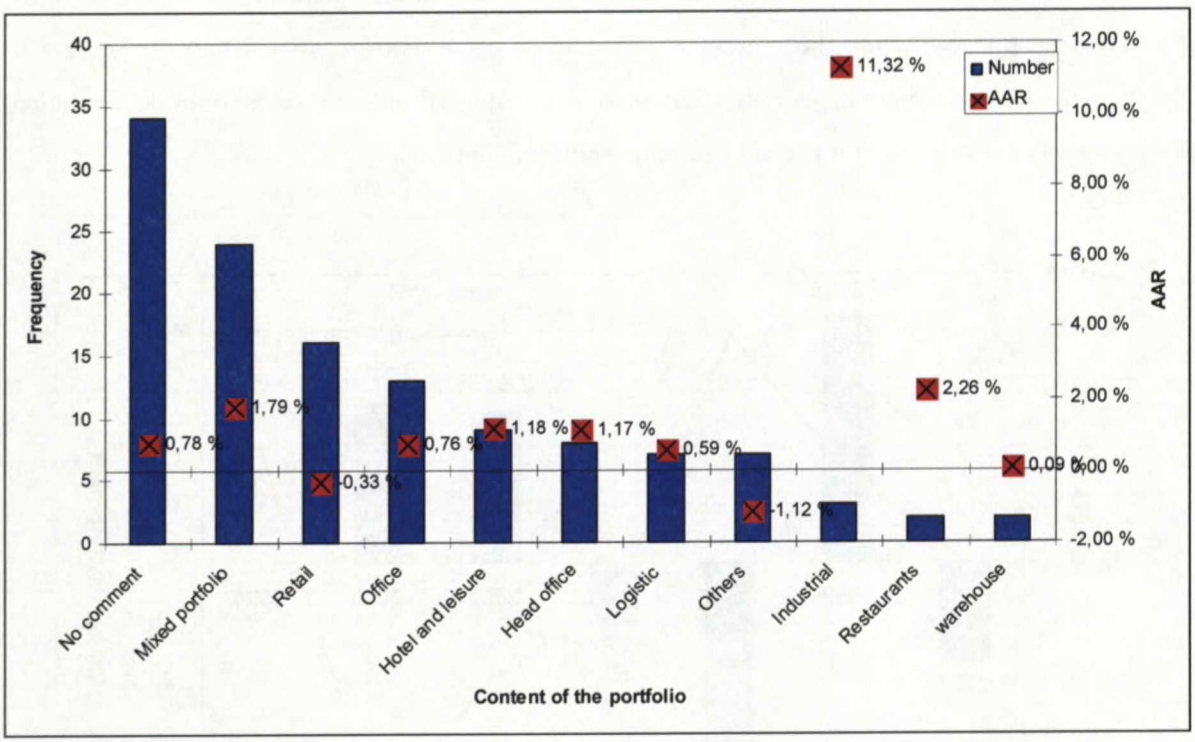

Figure 17. ***AAR distribution over different property portfolio types.***

7.2 Financial Background and SLB Impact on Financial Ratios

It is often argued that SLB transactions made under financial distress and to be motivated by the management's need to improve financial ratios such as liquidity and return on assets. Therefore, it is important to study how SLB transactions actually affect these financial ratios. I first convert the financial statement data into euros and then test the difference between pre- and post-transaction using Student's *t*-test for the means and Mann-Whitney test for the medians. Unfortunately, financial information is available for 96 SLB transactions by 67 companies only. Any overlapping figures from the same event year are removed from the results. In other words, if there are two or more SLB transactions during the same year, the company is included in the figures only once.

The pre- and post-SLB transaction figures, as well as the difference between them, are reported in Table 11. It shows that company sizes are widely spread, thereby suggesting that an SLB is a tool for many sizes of companies. The average turnover increases from 12,957 million euros to 13,162 million euros, which is statistically insignificant in both tests.

To measure the likely financial distress, I employ the equity to total capital ratio. Prior to the transaction the average is 63.14 percent and the median is 67.62 percent. These cannot be interpreted as signs of financial distress. The average decreases by 3.99 percent and the median decreases by 3.57 percent, but neither of the decreases is statistically significant. This suggests that SLBs do not alter the companies' leverage ratios.

Interestingly, ROA decreases in terms of both the average and the median. The average return on asset prior to the transaction is 4.33 percent, dropping to 1.92 percent after the transaction. This presents a decrease of 58.39 percent which is statistically significant at the 10 percent level. However, the change in median is only 28.84 percent which, in turn, is not statistically significant. Surprisingly, this observation conflicts with the common view that SLBs are made to improve the ROA figures. The reasons for this decline can be, for example, the increased amount of assets, tax optimization, or both. On the other hand, the SLB might have been the management's answer to declining profitability.

The turnover to total assets ratio, or asset turnover, as it is commonly called, shows how efficient asset usage is. Asset turnover is commonly interpreted as a proxy of the company's

pricing strategy. It increases in terms of both the mean and the median but, alas, both moves are statistically insignificant.

The impact on interest rate gives conflicting results. The average decreases by 3.46 percent from 8.77 percent to 8.46 percent. However, the median increases by 4.91 percent from 7.43 percent to 7.80 percent. Both of these changes are insignificant.

The current ratio increases in terms of both the means and the median which is almost obvious. However, the increase is not as high as could have been assumed. The figures of both before and after the transaction remain on the satisfactory current ratio level of between 1 and 2. The average current ratio increases by 4.72 percent from 1.31 to 1.37 but the change is statistically insignificant. The median current ratio change of 2.89 percent from 1.07 to 1.10 is also statistically insignificant. A possible interpretation is that the released cash is not, on average, used to improve liquidity but that it is redeployed elsewhere, e.g. in the core business.

The average market-to-book ratio decreases insignificantly by 22.73 percent from 3.26 to 2.52. The figure tells that the companies are, on average, value creating companies rather than value destroying companies[16]. Also the median market-to-book ratio decreases by 13.79 percent from 2.04 to 1.76, which is less than the average ratio. The change in the median is significant at the standard 10 percent significance level.

Unfortunately, the tax rate is available for just 66 cases pre-transaction and for 57 cases post-transaction. Whereas the average tax rate increases insignificantly by 4.36 percent from 27.57 percent to 28.77 percent, the median tax rate decreases insignificantly by 1.73 percent from 29.14 percent to 28.23 percent. Thus, the results suggest that an SLB transaction has no impact on the companies' tax rate.

Because SLB transactions involve the sale of the company's real estates, also called buildings, it is interesting to see how much buildings the companies have owned, and how the transaction affects these holdings. In an SLB transaction the average buildings to assets ratio decreases by 16.77 percent from 19.30 percent to 16.06 percent which is significant at the standard 1 percent level. The change in the median is also to the same direction, a decrease of -31.51 percent from

[16] A company that makes a profit at exactly the required rate of return has a price to book ratio of 1. In value destroying companies the ratio is under 1 and in value creating companies the ratio is over 1.

9.81 percent to 6.72 percent, but it is significant only at the standard 5 percent level. In a similar vein, the change in Buildings to PPE is negative and statistically significant at the standard 5 percent level with both tests. The average PPE to total assets decreases by 7.25 percent from 33.23 percent to 30.82 percent, and the median reacts in the same direction. The change in the average is significant at the standard 1 percent level while the change in the median is significant only at the 10 percent level. This is in line with the results of the previous studies, such as Nappi-Choulet (2002), indicating that property and plant holdings are relatively higher in Europe compared to the U.S.A., and that the ratio is going to decrease over time. However, the data fails to show where the money is funnelled. Because both equity to total capital and PPE to total assets ratio have decreased, it seems that the money is included in some other accounts, or may have been distributed to the shareholders.

Table 11. Descriptive financial statistics

This table illustrates descriptive financial statistics for the sample of 96 sale and leaseback announcements by 67 companies over the period 1998–2003. Panel A describes financial information prior transaction and panel B post transaction. The data is collected and calculated from financial statement information. Panel C describes the change between prior and post data averages and medians. The statistical difference is tested with the *t*-test for averages and with Mann-Whitmann test for medians. Market-to-book ratio excludes all negative and outlying observations. Also all financial institutions are excluded from the sample. The data collected from ThomsonOneAnalytics database is incomplete and, therefore, some of the figures are missing.

PANEL A: Financial ratios in financial statement prior transaction (-1)

	Mean	Median	σ	N
Turnover (1 mill. EUR)	12 957	6 839	15 711	94
equity/total capital	63,14 %	67,62 %	24,01 %	94
ROA	4,33 %	4,16 %	10,48 %	90
Turnover/Total assets	116,65 %	104,32 %	86,59 %	92
Interest Rate	8,77 %	7,43 %	0,72 %	90
Current ratio	1,31	1,07	1,19	82
Market to Book	3,26	2,04	3,49	92
Tax Rate	27,57 %	29,14 %	1,26 %	66
Buildings/Assets	19,30 %	9,81 %	19,21 %	82
PPE/Total Assets	33,23 %	33,57 %	23,38 %	96
Buildings/PPE	49,84 %	43,18 %	31,35 %	80

PANEL B: Financial ratios in financial statement post transaction (0)

	Mean	Median	σ	N
Turnover (1 mill. EUR)	13162	7401	16078	94
equity/total capital	60,63 %	65,14 %	28,13 %	94
ROA	1,92 %	2,96 %	11,03 %	90
Turnover/Total assets	126,00 %	108,02 %	94,90 %	92
Interest Rate	8,46 %	7,80 %	0,61 %	90
Current ratio	1,37	1,10	0,95	82
Market to Book	2,52	1,76	13,10	92
Tax Rate	28,77 %	28,63 %	1,58 %	57
Buildings/Assets	16,06 %	6,72 %	18,40 %	82
PPE/Total Assets	30,82 %	31,16 %	23,37 %	96
Buildings/PPE	43,11 %	37,12 %	30,89 %	81

PANEL C: Change in financial ratios' means and medians

	t-test for means			Mann-Whitmann test		
	Change in mean	t-Value	P - value two-tail	Change in median	z-value	P - value two-tail
Turnover (1 mill. EUR)	1,58 %	-0,545	58,71 %	8,22 %	0,121	45,18 %
equity/total capital	-3,99 %	1,320	19,02 %	-3,67 %	0,799	21,20 %
ROA	-55,59 %	1,982*	5,06 %	-28,84 %	0,947	17,18 %
Turnover/Total assets	8,02 %	-3,288***	0,14 %	3,55 %	0,783	21,67 %
Interest Rate	-3,46 %	0,406	68,59 %	4,91 %	0,415	33,91 %
Current ratio	4,72 %	-0,892	37,50 %	2,89 %	0,586	27,89 %
Market to Book	-22,73 %	0,543	58,86 %	-13,79 %	1,412*	7,90 %
Tax Rate	4,36 %	-0,601	54,89 %	-1,73 %	1,139	12,74 %
Buildings/Assets	-16,77 %	4,735***	0,00 %	-31,51 %	1,796**	3,63 %
PPE/Total Assets	-7,25 %	3,426***	0,09 %	-22,15 %	1,429*	7,65 %
Buildings/PPE	-13,51 %	4,454***	0,00 %	-14,03 %	1,682**	4,63 %

7.3 Multivariate Analysis

In this chapter I examine the relation between abnormal stock returns and a number of independent variables that were hypothesised in Chapter 4.3 to influence abnormal returns.

7.3.1 Variables

The dependent variable in my regressions is the one-day average AR for the day 0. Because the data obtained from ThomsonOneAnalytics database is incomplete, sample sizes vary across regressions. For the same reason it is not meaningful to put all variables into the same model. In the regressions I report t-values, p-values, R-square, and adjusted R-square values for different models.

Control Variables

I introduce several control variables into my analysis to control for the industry, country, and firm characteristics. I use discrete (0,1) dummy variables to control for both industries and countries. To control for the deal size I employ a relative deal size variable defined as the continuous TV/MCAP ratio. As I showed before, the TV/MCAP ratio has significant explanatory power over abnormal returns and, therefore, should obviously have a positive and statistically significant sign in the regressions.

Financial state during the transaction

To incorporate the companies' financial state around the event year, I use the average turnover, average equity-to-capital ratio, and the average turnover-to-assets ratio, all of which are calculated from the companies' pre- and post-event year financial statement ratios. To control for any firm size effect, I use a continuous size variable calculated as the natural log of a firm's average turnover in euros. The average equity-to-total capital ratio is incorporated to test whether the company's long-term credit quality affects the abnormal returns, as suggested in Chapter 2.1. The turnover-to-total assets (asset turnover) ratio measures the firm's efficiency in using its assets; the higher the number, the better. It also indicates the pricing strategy: Companies with low profit margins tend to have high asset turnovers, and those with high profit

margins tend to have low asset turnovers. The event year's profitability is incorporated by using its return on assets ratio.

Financial state prior to the transaction

To test the relation between credit quality and abnormal returns, the credit quality of the seller-lessee is measured in addition to the average Equity-to-Total Capital ratio, as the (1) continuous Current ratio prior to the transaction (t = –1), which is an indicator of short-term financial distress, and (2) continuous interest rate prior to the transaction (t = –1) assuming that it works as a proxy of the company's credit rating and cost of external financing. The continuous Tax rate prior to the transaction (t = –1) is incorporated into the regression model to test the tax savings hypothesis. The continuous Market-to-Book ratio prior to the transaction (t = –1) is included to find out whether the companies are destroying or creating value. The continuous Buildings-to-Assets ratio prior to the transaction (t = –1) measures how large a share of the total assets is covered by property holdings.

Dummy variables

Dummy variables are used to test the relation between abnormal returns and the use of money and book profit announcements. Dummy value (1) means that the company has made an announcement and zero (0) is used for all other cases. Two different variables are used for book profits: 1) Announced book profit, i.e. the firm has indicated in its press release that it has made a book profit or it announces both the selling price and the book value of the buildings, and 2) Value>book buildings prior transaction, i.e. the deal value exceeds the value of net book buildings on the balance sheet. The net book building is defined as the depreciated book value on the balance sheet. The book profit figure illustrates the hidden reserves that exist in the balance sheets of companies. Also, the use of money is divided into two variables: 1) Core and Growth indicates that company has announced that it will use the proceeds to invest in core operations, such as increasing profitability and support growth, and 2) Decrease debt indicates that the company is going to cut its debt burden.

7.3.2 Correlations

The correlations between financial variables are shown in Table 12. Correlations of over 0.4 are bolded in the table. There are only two disturbing correlations: the first, between revenues and the average equity-to-capital ratio, is -0.404, and the second, 0.473, between average equity-to-capital and the asset-turnover. Also other, though weaker, correlations are found. Revenues are negatively correlated with the current ratio, indicating that the bigger the company, the lower its current ratio. Revenues are also negatively correlated with the TV/MCAP ratio. Even thought these correlations must be taken into account, it is impossible to completely avoid putting them into the same models.

Table 12. Correlations between variables

		LN (Average Revenues)	Average Equity/ Capital	Average Turnover/ Assets	ROA	Interest rate	Market-to Book	Tax Rate	Current Ratio	Buildings-to-Assets	TV / MCAP
LN (Average Revenues)	**Pearson Correlation**	1									
	N	94									
Average Equity-to-Capital	**Pearson Correlation**	**-0,404**	1								
	N	93	95								
Average Turnover-to-Assets	**Pearson Correlation**	0,021	**0,473**	1							
	N	94	93	94							
ROA	**Pearson Correlation**	0,209	0,313	-0,126	1						
	N	92	93	92	94	90					
Interest rate	**Pearson Correlation**	-0,002	0,285	0,136	0,062	1					
	N	92	91	92	90	92					
Market-to-Book	**Pearson Correlation**	0,223	-0,063	-0,075	-0,016	-0,065	1				
	N	91	92	91	91	89	93				
Tax Rate	**Pearson Correlation**	0,107	-0,327	-0,080	-0,162	-0,215	0,121	1			
	N	69	71	69	69	67	69	71			
Current Ratio	**Pearson Correlation**	-0,375	0,320	-0,185	-0,111	0,009	-0,035	-0,054	1		
	N	87	88	87	89	86	86	64	89		
Buildings-to-Assets	**Pearson Correlation**	-0,108	0,095	0,097	-0,029	0,016	-0,382	-0,134	-0,111	1	
	N	81	81	81	81	81	78	58	81	81	
TV/MCAP	**Pearson Correlation**	-0,385	-0,079	-0,022	-0,222	-0,079	0,236	-0,065	-0,110	0,159	1
	N	90	91	90	91	88	89	68	86	78	92

7.3.3 Regression results

The results of cross-sectional regressions are reported in Table 13. I have used several regression models to mitigate problems like multicorrelation and missing data items. The first model examines how the event year's financial state affects the ARs. Models two (2), three (3), four (4), five (5), and six (6) test the hidden reserves and the usage of money. The remaining models seven (7), eight (8), and nine (9) test how credit quality, tax rate, real estate holdings, and the market-to-book ratio affect ARs. Each model takes into account the country- and industry-specific variables. All coefficients are multiplied by 1000 to elicit the power of the variables. The model's F-value and its significance level, R-square, adjusted R-square, and the number of observations in the regression are given at the bottom of each model.

The results show that the Equity-to-Total Capital ratio is positively and statistically at the 1% level related to the abnormal returns. This supports the hypothesis that companies with better credit quality can get better transaction terms and that a sale and leaseback transaction may be viewed as a form of secured lending, in which credit quality affects the lender's required rate of return. The regressions also show that ROA is negatively related with the AR in the sample with a confidence level as high as 95 percent, which is in support of the hypothesis that SLBs are often used to achieve cost savings and to increase efficiency. The negative relation can also be explained with the mathematic fact that the lower the ROA is, the higher the percentage impact of achieved savings will be. Asset turnover seems to have a high AR explanation power which manifests itself in every regression where I used it. This can mean that companies with a higher asset utilization ability are supposed to redeploy the released cash more efficiently to create more income, or that the SLB is seen to increase the profit margin, benefiting companies with high asset turnovers most.

The regressions also test the use of money. As predicted, the announcement to use the proceeds in core business and growth is positively and statistically related to the ARs at the standard 1% significance level. This observation is in line with the prediction that an SLB increases the present value of future growth opportunities. In other words, when managers announce that they are going to redeploy the money to improve the core business, the shareholders may expect the company to grow more rapidly. This supports the investment strategy hypothesis. Furthermore, the investment strategy hypothesis can be viewed as to improve the growth prospects, or profitability, or both, a fact that is instantly reflected in the share prices through the valuation models. This finding is in line with Vijh's (2002) findings.

The second assumption of the pecking order theory states that managers act in the interest of the company's existing shareholders. This means that managers may even forgo positive present value projects if it requires issuing new equity since this would give much of the project's value to new shareholders at the expense of old ones. The results suggest that an SLB can be used to mitigate the problem of adverse selection because it does not distribute information to outsiders although it simultaneously offers enough cash to seize the positive NPV-projects. Even though an announcement about "how to use the proceeds" can decrease information asymmetry between the managers and the shareholders, the announcement to use the proceeds to cut debt and thereby decrease managerial discretion over the capital has no statistically significant impact

on shareholders' wealth. This result does not support the financing strategy hypothesis and is, therefore, different from Vijh's (2002) findings among equity carve-outs.

Book profit announcements seem to have a positive and statistically significant impact at the 1 percent level on shareholders' abnormal returns. However, when the Transaction Value-to-Book Buildings ratio of companies exceeds 100 percent (13 observations), the relation is no longer found. These results somewhat suggest that it might be hard for outsiders to analyze the real estate holdings and their market values. They rarely belong directly to the companies' core businesses and, therefore, are only rarely under investors' review. It is, therefore, possible that a company develops hidden reserves that eventually become hard to observe even by insiders. When the company announces the amount of book profit, the market is able to find out more about the terms of the transaction and realize whether the deal is good or bad. However, when the book profit is not announced and the deal value exceeds the value of book buildings, the prices do not adjust in the same direction. The reason for this can be, for example, that shareholders are not interested in real estate matters and do not recognize the hidden reserves unless they are explicitly announced. On the other hand, the deal may be observed to have been made as the company's last resort, which means that it cannot have been made with optimal terms. The market might thus believe that the company has sold all its real estate and, therefore, the deal is not registered as a good one. Either way, it seems that the market does not recognise balance sheet items such as real estates when they analyze SLB transactions.

Multiple regressions fail to find any relation between the ARs and the companies' interest rates, current ratios, market-to-book ratios, tax rates, and buildings-to-total assets ratios even when the models control for industry- and country-specific variables. These results suggest that a successful SLB is not related to the companies' short term liquidity or cost of debt. Market-to-book ratio is also found irrelevant in determining the abnormal returns, which suggests that previously recorded growth projections and equity valuations have no impact on the abnormal returns. The tax rate hypothesis does not explain the abnormal returns as has been suggested in previous studies in the U.S.A. Also Buildings-to-Assets ratios are irrelevant in predicting abnormal returns, which again slightly supports the view that shareholders do not recognise real estate as an important component of firm value. This observation does not support the view that an SLB increases the managements' focus and quality of decisions.

As I showed in Chapter 6.1.2, the TV/MCAP ratio is positively related to abnormal returns. However, in these regressions it was significant only at the 10 % level. The reason for this is most obviously that the relation is nonlinear which is also supported by the Figure 14.

Model three (3) has the best fit with every measure. In addition to country, industry and the TV/MCAP ratio it includes the current financial state and the use of money announcements. The *t*-value is 2.050 but significant only at the 10 percent level. The R-square is 0.313 and the adjusted R-square is 0.160. Model eight (8) which takes into account, for example, the tax rate is the worst fit. However, the poor fit might be a consequence of the low number of observations.

The results, in general support the hypothesis that a successful sale and leaseback transaction requires a good quality seller-lessee. The insignificant relation between the turnover and abnormal returns suggests that firm size does not offer any economies of scale effect. The higher the asset turnover, the more efficiently the company can utilize the redeployed cash. The worse the quality of the seller-lessee, the higher the required risk premium is likely to be. Thus, the better the quality of the seller-lessee is, the lower the likely lease payments that offset the investor's risks will be. An SLB offers the highest payoff when it is not made with one's back against the wall, as the company's last resort. On the other hand, the results suggest that investors are not able to observe the value of real estates at large and create hidden values like Brennan (1990) suggests.

Table 13. Multivariate analysis of abnormal event returns in SLB transactions

This table shows the cross-sectional ordinary least squares regression models. The dependent variable is AR, the percentage abnormal return for the day of the announcement of the SLB calculated using the standard event study method. To control Industry- and Country-specific characteristics I use dummy variables. The variable LN (average turnover) is the natural log of the average turnover in euros calculated from the pre and post figures. Other (Average) figures are also calculated from pre and post figures to incorporate the average financial situation over the event period. ROA 0 is the event year's return on assets and is a measure of the profitability under which the transaction is made. The interest rate, current ratio, Market-to-Book, tax rate and buildings-to-total assets are taken from financial statements from the beginning of the event year. Announced book profit is a dummy variable that equals 1 if a book profit is announced. The dummy variable Value>book buildings is set to 1 if the ratio exceeds 1. The usage of money is set to 1 if the money is announced to be used for core and growth or to decrease debt. The significance of the deal is measured with the TV/MCAP ratio which is the transaction value divided by the market capitalization. The figures in parentheses are p-values. The significance levels 10%, 5%, and 1% are denoted as *, **, and ***, respectively.

	Panel of Dependent Variable: Abnormal return - total sample								
Independent Variables	Model 1	Model 2	Model 3	Model 4	model 5	Model 6	Model 7	Model 8	Model 9
Constant	-28,269	-14,137	-35,588	-6,646	-30,485	-17,266	-47,048	-36,404	-47,546
	0,373	0,551	0,257	(0.789)	0,339	0,468	0,350	0,285	0,331
Industry	V	V	V	V	V	V	V	V	V
Country	V	V	V	V	V	V	V	V	V
Financial state during the transaction									
LN (Average turnover)	0,716	2,038	2,178	0,789	1,344	2,117	0,044	2,992	1,967
	(0,796)	(0,388)	(0,432)	(0.756)	(0,634)	(0,369)	(0,992)	(0,318)	(0,643)
Equity/Total Capital (Average)	0,499		0,392		0,465		1,132	0,597	0,869
	(0,094)*		(0,187)		(0,124)		**(0,003)*****	(0,147)	**(0,016)****
ROA 0	-1,092		-0,650		-0,768		-1,964	-0,850	-1,423
	(0,131)		(0,372)		(0,310)		**(0,031)****	(0,323)	(0,134)
Turnover/Total Assets (Average)	22,200		18,524		17,390	15,829			
	(0,009)***		**(0,029)****		**(0,061)***	**(0,038)****			
Financial state prior transaction									
Interest rate -1							-0,339		
							(0,353)		
Current ratio -1							-8,459		-9,022
							(0,139)		(0,105)
Market-to-Book -1							-0,040	1,924	
							(0,985)	(0,374)	
Tax rate -1								-0,075	
								(0,838)	
Buildings/Total Assets -1									-28,781
									(0,348)
Hidden reserves									
Announced book profit (Dummy)				51,323	25,613	4,876			43,225
				(0.004)***	(0,194)	(0,836)			**(0,031)****
Value>book buildings prior transaction (Dummy)				0,737	-5,073	3,253			
				(0.959)	(0,722)	(0,810)			
Usage of money									
Core and Growth		52,633	35,384			45,330			
		(0,001)***	**(0,037)****			**(0,030)****			
Decrease debt		-25,837	-26,232			-24,975			
		(0,226)	(0,210)			(0,241)			
Significance of deal									
TV/MCAP	5,363	22,170	20,101	9,722	8,340	23,631	2,760	36,555	9,629
	(0,678)	**(0,088)***	(0,165)	(0.435)	(0,529)	**(0,071)***	(0,861)	(0,167)	(0,522)
F-value	**1,826**	**1,708**	**2,050**	1,411	1,727	**1,780**	1,325	0,715	**1,692**
Significance F	**0,050***	**0,076***	**0,021****	0,174	0,061	**0,050***	0,211	0,757	**0,072**
R square	0,257	0,224	0,313	0,197	0,277	0,278	0,252	0,189	0,304
Adjuster R square	0,116	0,093	0,160	0,057	0,117	0,122	0,062	-0,075	0,124
N	89	91	89	91	89	91	80	62	79

7.4 Summary of Results

Corporate real estate sale and leaseback has, on average, a positive impact of 1.03 percent on shareholders' wealth in Western Europe during the period of 1998 to 2003. The transaction value to market capital ratio seems to be an important variable in determining the size of the impact. This supports the latent assets hypothesis presented by Brennan (1990).

An SLB does not have such an impact on financial ratios as has been commonly suggested. The decrease in ROA after an SLB is nearly significant at the 5 % level. On the other hand, the average asset turnover of companies increases, which can be interpreted to be caused by the desire to invest the money back in core operations. The results suggest that an SLB might decrease the average market-to-book ratio but, on the other hand, this impact might have been caused by the economic slump just after the turn of the millennium. The largest impact the SLB seems to have is on real estate holding levels which decrease compared to both PPE and assets. The results suggest that SLBs do not have any other major influences on the companies' average financial ratios except for increased asset turnover and decreased real estate holdings ratios.

The summary of multivariate results and hypotheses is shown in Table 14. The results suggest that financially firm companies are better off making SLB transactions. On the other hand, the results suggest that the use of money and book profit announcements are important in determining the abnormal returns. The tests do not find support for the tax savings-, financing strategy-, or financial distress hypotheses and, therefore, I reject them. The results also suggest that the pre-event real estate holdings level is not important in determining the abnormal returns. The results, therefore, do not find any support for the refocusing hypothesis.

Table 14. ***The summary of tested hypotheses in the multivariate analysis***

	H_0	Sign	Significance level
Deal Specific			
Latent assets	Accept	+	10 %
Hidden reserves	Accept	+	1 %
Use of Funds: Core and growth	Accept	+	1 %
Use of Funds: Repay debt	Reject	n.a.	-
Financial state			
Equity-to-Total capital	Accept	+	1 %
Current ratio	Reject	n.a.	-
Interest rate	Reject	n.a.	-
ROA	Accept	-	5 %
Asset turnover	Accept	+	1 %
Market-to-Book	Reject	n.a.	-
Tax savings	Reject	n.a.	-
Buildings-to-Assets	Reject	n.a.	-

8 CONCLUSION AND DISCUSSION OF RESULTS

In this Chapter I round up the results of the whole study. In Chapter 8.1 I show the conclusion which aims to give the answer to the research questions presented earlier in Chapter 1.2. In Chapter 8.2 I discuss the results and suggest some topics for further research.

8.1 Conclusion

The theoretical part of this study was constructed to piece together the SLB framework from the seller-lessee's financial point of view and to offer a theoretical background for further analysis of the SLB impact on shareholders' wealth. The main research problem was divided into smaller parts to uncover the key characteristics that may have an effect on the SLB transaction.

The empirical part in Chapter 7.1 examined the impact of a sale and leaseback on the shareholders' wealth in Western Europe. The results to the first research question suggest that the sale and leaseback transaction has, on average, a positive impact of 1.03 percent on shareholders' wealth. The results are in line with previous studies made in the U.S.A. and presented in Chapter 4.1. The results also show that the average increase in firm value is visibly higher in sale and leaseback transactions, the size of which is large in comparison to the market value of the seller-lessee. The results thus hint at the existence of hidden values like latent assets, as Brennan (1990) describes them, and hidden reserves, as shown in Chapter 3.8.2. Releasing hidden values and delivering the information to the market repairs the market consensus about the value of the company and, on average, leads to a clearly positive market reaction.

> *Corporate real estate sale and leaseback announcement has, on average, a positive impact on shareholders' wealth. The announcement effect is in conjunction with the transaction value to company's market capital ratio which supports the latent assets hypothesis.*

Chapter 7.2 of the empirical part aimed at giving an answer to the second research question about the impact of an SLB on financial ratios. Unlike commonly suggested, sale and leasebacks do not, at least in short term, improve ROA. It rather seems to decrease it, which may be a result of tax planning usually performed to avoid capital gain taxes. On the other hand, sale and leasebacks seem, on average, to improve asset turnover which can result from increased

turnover, decreased amount of assets, or both in unison. The most dramatic but also the most obvious impact is found in the buildings-to-assets and buildings-to-PPE ratios, both of which decrease significantly in terms of both the average and the median. The transaction does not have a statistically significant impact on current ratio, which implies that SLBs are not commonly used to increase liquidity. Another interesting observation is also against the common view: it is assumed that companies usually enter into sale and leaseback deals in a financial distress but the results show that the average equity-to-capital ratio is over 60 percent both before and after the transaction, i.e., on a level that cannot be interpreted to signal financial distress.

> *Sale and leaseback decreases the amount of capital tied in the company's real estates and thus decreases the buildings-to-assets ratio. Unlike expected, the ROA figure decreases, which might be due to corporate tax planning activities. The increase in asset turnover can result from decreased assets, increased sales, or both acting together.*

The third research question covers an extensive research area by exploring what deal- and firm-specific characteristics are likely to cause the abnormal event returns. After controlling for company and deal size, and country- and industry-specific characteristics, the tests examined various deal- and firm-specific variables in Chapter 7.2.4. Abnormal returns were found to be positively and statistically significantly related to the equity-to-total capital and asset turnover ratios. The results suggest that fundamentally sound companies are likely to be better at making SLB transactions. The negative relation with the return-on-assets ratio, on the other hand, suggests that SLBs will most benefit companies with low return-on-assets ratios. This can be a result of the market's perception that an SLB is likely to improve companies' financial performance. The lower the ROA is, the higher the likely percentual increase in it is. Book profits lead to a statistically significant positive market perception only when companies announce them. Furthermore, the test found no relation between real estate holding levels and abnormal returns. The reason for this behaviour might be the market's low ability (skills, interest, or too much complexity) to observe the values and amounts of companies' real estate holdings at large. The tests found support for the investment strategy hypothesis by indicating a statistically significant relation between announcements to use money on core and growth. On the other hand, when the money was used to repay debt, no relation was found, and the financing hypothesis must be rejected. These observations are similar to Vijh's (2002) findings

among equity carve-outs. Both tests performed in Chapters 7.1.2 and 7.2.4 found support for the latent assets hypothesis presented by Brennan (1990). It states that companies' real estate holdings are too hard and complex to observe by outsiders and, therefore, the market consensus does not properly reflect them in share prices. When the information about the value of these latent assets is delivered to the market at large, market consensus is repaired and the prices adjust upwards.

> *The abnormal returns of SLBs are higher for companies with a solid financial background but low profitability. The market adjusts positively when the company announces book profits which help the market to analyze the deal. The use of proceeds announcements has s positive impact only if the proceeds are used for core and growth. This supports the investment strategy hypothesis but, on the other hand, does not support the financing strategy hypothesis. The Transaction value to market capital is an important variable delivering information about latent assets to the market. The study does not find any support for the tax savings or financial distress hypotheses in Western Europe.*

The main information given by the analysis is that the real estate outsourcing activities of corporations seem to have justifiable motivations. The results for the primary research question "What are key characteristics of a successful sale and leaseback transaction?" can be summarised by stating that an SLB is advantageous when it is not performed with one's back against the wall. This means that financially good quality companies are better off in concluding a sale and leaseback agreement than companies that enter into the agreement as their last resort in financial distress. The impact on shareholders' wealth is in conjunction with the amount of hidden values released compared to the company's market capital.

> *A sale and leaseback is advantageous for financially firm companies aiming to support growth and achieve higher profitability by converting hidden values into liquid cash. A sale and leaseback is less advantageous for companies that perform the transaction in financial distress, or as the company's last resort.*

8.2 Discussion

In my opinion, as well as many others', it is important for company managers to know how their financing decisions may affect shareholders' wealth. In finance this point of view is presented in the pecking order theory, which puts the different financing instruments in order of preference according to their desirability from the shareholders' point of view. According to this theory, a sale and leaseback is the preferred method compared to new equity, debt, as well as leasing. Compared to Smith (1986), sale and leaseback is the only value increasing financing method. It enables the management to obtain cash equal to market value of the real estate and funnel these resources into core operations. Simultaneously, the company can release the hidden reserves that otherwise would be difficult or time consuming to take advantage of. When the dynamics of the sale and leaseback transaction are understood, it is possible to take the sale and leaseback into account as a part of the financing plan in order to select the best financing solution. It is, therefore, important to understand that an SLB may, or may not, be the optimal financing solution depending on the company's financial situation and the availability of other sources.

To understand real estates we should remember that this asset class has an operational, strategic, and financial role in companies' business. Usually this alone is enough to confuse people. Because of the many roles of real estate, it is understandable that it is hard for investors and other outsiders to analyze the amount and the value of companies' real estate holdings. This common misunderstanding may create hidden values. Therefore, companies with massive real estate holdings should rediscover their real estates and their value to understand them also as source of finance and financial flexibility. As this study shows, a corporate real estate sale and leaseback may offer additional, and more favourable, financing over the traditional equity and debt in the pecking order framework.

In finance we should thus begin to recognize real estate as a part of the broader financial market and try to understand how they should be handled as financial instruments. They clearly preserve value and might offer lots of financing when it is needed to expand operations. Currently preserved hidden values seem to offer a great profit opportunity for real estate raiders at least in the acquisition market when the firm value does not yet fully reflect the value of the company's business plus its real estate holdings.

Investors may find this study interesting in analysing whether a specific sale and leaseback transaction is a good or bad one. By using the ten-day cumulative abnormal return shown in Chapter 7.1.2 it is possible to find an interesting segment that has offered an 5 percent average cumulative abnormal return in just eight days. For example, if an investor would have invested one euro for ten days in each of the 45 SLB transactions in the Large group which TV/MCAP ratio exceeds 0.0984, he would have earned, on average, 5 percent per investment. This stands for a return on investment of (5% * 45 =) 225 percent over the five-year period. On the other hand, if the investor would have made an initial investment of one euro in the first sale and leaseback transaction with a TV/MCAP ratio exceeding 0.0984, and then continuously invested the proceeds in every following transaction, he would have earned ((1.05^45)–1 =) 799 percent times his initial investment during the five year period.

The ratification of the IFRS regulations is likely to change the sale and leaseback environment drastically. The most important change is found in how the leasing contracts are handled in the financial statement. Another fundamental change is that assets, such as real estates, are now recorded with their current market values, which most likely reduces the existence of hidden values which, in turn, leads to lower abnormal returns. This suggests that hidden values should no longer exist among companies that have adopted the IFRS. On the other hand, they still may exist among non-listed companies that have not adopted the standards.

Overall, it would be interesting to investigate how the abnormal returns are affected by theafter adoption of IFRS regulations. I still anticipate a positive market reaction. This is because one can argue that real estate is more valuable when it is fully occupied than when it is only partially occupied. Practical valuation models assume that an individually sold real estate is not always fully occupied and, therefore, its market value should be less than what it is in an SLB transaction.

REFERENCES

Abarbanell, Jeffrey – Bernard, Victor (1995). Is the U.S. stock market myopic? Working paper, University of Michigan.

Adams A. – Clarke R. (1994). The Effect of Sale and Leaseback Transactions of Corporate Real Estate on Shareholder Value in the UK - an event study. *Working paper,* The University of Edinburgh.

Akerlof, George A. (1970). The market for lemons; quality uncertainty and the market mechanism. *Quarterly Journal of Economics.* 84:3, pp. 488-501.

Allen J. W. (1998). Equity Carveouts and managerial discretion. Journal of Finance 53:1, pp. 163-186.

Allen, Marcus – Rutherford, Ronald – Springer, Thomas (1993). The wealth effects of corporate real estate leasing. *Journal of Corporate Real Estate Research* 8:4, pp. 567-579.

Alvayay Jaime - Rutherford Ronald C - Smith William S. (1995). Tax Rules and the Sale and Leaseback of Corporate Real Estate. *Real Estate Economics.* 23:2, pp.207-238.

Ambrose W. B. (1990). Corporate Real Estate's Impact on the Takeover Market. *Journal of Real Estate Finance and Economics* 3 (4), pp. 307-322.

Amihud Y – Lev B. (1981). Risk reduction as a managerial motive for conglomerate mergers. *Bell Journal of Economics 12, pp. 605-612.*

Asquith, Paul – Mullins, David (1986). Equity Issues and Offering Dilution. *Journal of Financial Economics*, 15:2, pp. 61-89.

Ball, J. N. – Rutherford, R. C. – Shaw, R. J. (1993). The wealth effects of real estate spin-offs. *Journal of Real Estate Research*, 8:4, pp. 597-606.

Benjamin J. D. De La Torre C.- Musumeci J. (1998). Rationales for real estate leasing versus owning. *Journal of Real Estate Research* 15:3, pp. 223-237.

Bernard V. L. (1994). Accounting Based valuation method, determinants of book-to-market ratios, and implications for financial statement analysis. *Working paper,* University of Michigan.

Booth, M. (1999). How corporate real estate affects shareholder value? *Journal of Corporate Real Estate*, 2:1, pp. 19-28.

Bowman, Robert (1980). The debt equivalence of lease: An empirical investigation. *Accounting Review*, 55, pp. 237-253.

Brant Bryan (2003). The State of Sale-Leasebacks: What Corporations Can and Should Expect Today? *Journal of Corporate Real Estate* 6:1, pp. 15-23.

Brealey, Richard A. – Myers, Stewart C. (2003). *Principles of Corporate Finance.* Seventh Edition. McGraw-Hill Irwin. New York, The United States of America.

Brennan J. Michael (1990). Latent Assets. *The Journal of Finance* 45, pp. 709-730.

Brounen, D. and Eichholtz, P.M.A. (2004). Development Involvement and Property Share Performance: International Evidence. *Journal of Real Estate Finance and Economics* 29:1, pp. 79.

Campbell, John – Lo, Andrew W. – MacKinlay, A. Craig (1997). *The Econometrics of Financial Markets.* USA: Princeton Press.

Cheong, Kiwoong – Kim, Chi Soo (1997). Corporate Real Estate Holdings and the Value of the Firm in Korea. *Journal of Real Estate Research* 13:3, pp. 273-295.

Comment R. – Jarrel G.A. (1994). Corporate focus and stock returns. *Journal of Financial Economics* 37, pp. 67-87.

De S. (1992). Diversification patterns and long-run corporate performance. *Managerial and Decision Economics* 13, pp. 1-13.

Dechow, Patricia – Hutton, Amy – Sloan, Richard (1997). An empirical assessment of the residual income valuation model, working paper, University of Michigan and Harvard University.

Delay – Lane - Vikas Mehrotra – Ranjini Sivakumar (1997). Corporate Focus and Value Creation. Evidence from Spinn-offs. *Journal of Financial Economic.* 45, pp. 257-281.

Deng Y. – Gyourko J. (1999). Real Estate Ownership by Non-Real Estate Firms: An Estimate of the Impact on Firm Returns. *Unpuplished working paper,* Wharton Business School.

Denis D. J.- Denis D. K. – Sarin A. (1997). Agency problems, equity ownership and corporate diversification. *Journal of Finance* 52, pp. 135-160.

Devaney S. – Lizieri C. (2004). Sale and leaseback, asset outsourcing and capital market impacts. *Journal of Corporate Real Estate.* 6:2, pp. 118-132.

Dewulf G. – Krumm P. – de Jonge H. (2000). *Successful Corporate Real Estate Strategies.* Arko Publisher, Nieuwegein.

Eckbo, B. Espen (1986). Valuation effects of corporate debt offerings. *Journal of Financial Economics*, vol. 11, 241-273.

Eichholtz P. M. A. – Veld H.O. – Vestbirk S. (1999). Going international: Liquidity and pricing in the largest public property markets. *Real Estate Finance* 16:3, pp. 74-81.

Ezzell John – Vora Premal (2001). Leasing versus purchasing: Direct evidence on a corporation's motivations for leasing and consequences of leasing. *The Quarterly of Economics and Finance* 41, pp. 33-47.

Fama E. F. – French K. R (2002). Testing tradeoff and pecking order predictions about dividends and debt. *Review of Financial Studies* 15, pp. 1-33.

Feltham, Gerald A. – Ohlson, James A. (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research* 11, pp. 689-731.

Fredrick Scott E. (1990). Tapping the Hidden Value of Your Assets. *Management Accounting.* 71:9, pp. 28-34.

Galperin Ron (1992). Corporations Use Sale/Leaseback To Cash In on their Real Estate. *National Real Estate Investor.* 34:5, pp. 72-76.

Geltner D. – Miller N. G. (2001). *Commercial Real Estate Analysis and Investments. Upper Saddle River,* NJ: Prentice – Hall.

Gibson, Virginia (2000). In search of flexibility in corporate real estate portfolios. *Journal of Corporatre Real Estate* 3:1, pp. 38-44.

Glascock, J.L., Davidson, W.N. and Sirmans, C.F. (1989). An Analysis of the acquisition and disposition of real estate assets. *Journal of Real Estate Research*, pp. 31-140.

Golan Mark (1998). The own v lease – Myth and reality. *Journal of Corporate Real Estate* 1:3, pp. 241-253.

Grinblatt M. – Titman S. (2001). *Financial Markets and Corporate Strategy.* 2nd Edition. Mcgraw-Hill education - Europe. UK.

Harris M. – Kriebel C. H. – Raviv A. (1982). Asymmetric information, incentives and intrafirm resource allocation. *Management Science* 28, pp. 604-620.

Hite G. – Owens J. E. – Rogers R. C. (1987). The market for interfirm asset sales. *Journal of Financial Economics* 18, pp.229-252.

Hitt M. A. – Hoskisson R. E. – Ireland R. D. (1999). *Strategic Management Competitiveness and Globalization.* 3rd Edition. South-Western, New York.

Holman R. – Johnston D. S. – Novogradac M. (1988). The Real Estate Sale-Leaseback. *Journal of Property Management.* 53:1, pp. 77-79.

Jaffe, Austin J. – Sirmans C. F. (2001). *Fundamentals of Real Estate Investment.* Third Edition. South-Western/Thomson Learning, Mason, Ohio, The United States of America.

Jensen M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review* 76, pp. 323-329.

John T.A. (1993). Optimality of Spin-offs and allocation of debt. *Journal of Financial and Quantitative Analysis*, 28:1, pp. 139-160.

Kaplan S. (1989). Management Buyouts: evidence on taxes as a source of value. *Journal of Finance.* 44, pp. 611-632.

Kim E. H. – Lewellen W. G. – McConnel J. J. (1978). Sale-and-Leaseback Agreements and Enterprise Valuation. Journal of Financial and Quantitative Analysis 30, pp. 871-883.

Kontes Peter W. – Mankins Michale C. – McTaggart James M. (1994). The Value Imperative. Managing for Superior Shareholder Returns. The Free Press, New York.

Krumm P. (1999). Corporate Real Estate Management in Multinational Corporations: A Comparative Analysis of Dutch Corporations, *PhD Thesis published by Arko Publishers.*

Krumm P. J. M. M. – Linneman P. (2001). Corporate Real Estate Management, *Wharton working paper* #370.

Kuruvilla J. (1994). "Corporate Real Estate Holdings and the value of the firm, an empirical investication"

Lang L. – Poulsen A. – Stultz R. (1995). Asset sales, firm performance, and the agency costs of managerial discretion. *Journal of Financial Economics* 37:1, pp. 3-37.

Laposa, Steven – Charlton, Mark (2001). European versus US Corporations; A comparison of property holdings. *Journal of Corporate Real Estate*, 4:1, 34-47.

Lapuma, V. Edvard (2001). Managing Director and Chief Acquisition Officer, W.P Carey – Co. A paper presented in Exporeal in Munich 2001.

Lee, Charles M.C. (1996). Measuring wealth. *CA Magazine* 129, pp. 32-37.

Lee, Charles M.C. – Shleifer, Andrei – Thaler, Richard H. (1991). Investor sentimentand the closed-end fund puzzle. *Journal of Finance* 46, pp. 75-109.

Lee, Charles – Myers, James (1999). What is the Intrinsic Value of the Dow? *The Journal of Finance* 54:5, pp. 1693-1742.

Lewellen, Wilbur. (1971). A pure financial rationale for the conglomerate merger. *Journal of Finance* 26, pp. 521-537.

Lewellen, Wilbur – Long, Michael – McConnel, John (1976). Asset leasing in competitive capital markets. *Journal of Finance*, 31, pp. 787-798.

Lewis, Craig M. – Schallheim, James S. (1992). Are Debt and Leases Substitutes? *The Journal of Financial and Quantitative Analysis.* 27:4, pp. 497-511.

Linn, Scott – Pinegar, J. Michael (1985). The effect of issuing preferred stock on common stockholders wealth. *Unpublished manuscript.* University of Iowa, Iowa City. IA.

Louko, Antti (2004). Competitive advantage from operational corporate real estate disposals. *International Journal of Strategic Property Management* 8:1, pp. 11-23.

Liow Kim Hiang (2004). Corporate Real Estate and Stock Market Performance. *Journal of Real Estate Finance and Economics.* 29:1, pp. 119-140.

Manning, C. (1991) Leasing versus purchase of corporate real property: Leases with residual equity interests. *Journal of Real Estate Research* 6:1, pp. 79-85.

McConnel J. J. – Muscarella C. J. (1985). Corporate capital expenditure decisions and the market value of the firm. *Journal of Financial Economics* 14:3

Meyer, Margaret – Roberts, John – Milgrom, Paul (1992). Organizational prospects, Influence Costs, and Ownership Changes. *Journal of Economics and Management Strategy* 1:1, pp. 9-35.

Mikkelson W. H. – Partch M. M. (1986). Valuation effects of securities offerings and the issuance process. *Journal of Financial Economics* 15:1, pp. 31-60.

Miller, Merton – Upton, Charles W. (1976). Leasing, Buying, and the cost of capital services. *Journal of Finance* 31. 761-786.

Murray, Z. Frank – Vidhan, K. Goyal (2003). *Journal of Financial Economics* 67. 217-248.

Myers S. C. (1984). The capital structure puzzle. *Journal of Finance* 39, pp. 575-592.

Myers S. C. – Majluf N. S. (1984). Corporate Financing and Investment decisions when firms have information the investors do not have. *Journal of Financial Economics* 13, pp.187-221.

Myers, Stewart – Dill, David – Bautista, Alberto (1976). Valuation of financial lease contracts. *Journal of Finance*, Vol. 31, 799-819.

Montgomery C. A. (1994). Corporate diversification. *Journal of Economic Perspectives 8, pp. 163-178.*

Myerson R. B. (1982). Optimal coordination mechanism in generalized principal-agent problems. *Journal of Mathematical Economics* 10, pp. 67-81.

Nappi-Choulet, Ingrid (May 2002). Corporate Property Outsourcing in Europe: Present Trends and New Approach for Real Estate Economics. *European Property Strategies Conference in Wiesbaden.*

Ohlson, James A.(1990). A synthesis of security valuation theory and the role of dividends, cash flows, and earnings. *Contemporary Accounting Research* 6, pp. 648-676.

Ohlson, James A.(1991). The theory of value and earnings, and an introduction to the Ball-Brown analysis. *Contemporary Accounting Research* 7, pp. 1-19.

Ohlson, James A.(1995). Earnings, book values, and dividends in security valuation. *Contemporary Accounting Research* 11, pp. 661-687.

Richard, Pascal (2003). Corporate property sale and leaseback securitization. *Briefings in Real Estate Finance* 3:2, pp. 117-129.

Rodriquez, M. – Sirmans, C.F. (1996). Managing corporate real estate: Evidence from the capital markets. *Journal of Real Estate Literature*, 4:1, pp. 13-33.

Rutherford Ronald C. (1990). Empirical Evidence on Shareholder Value and the Sale-Leaseback of Corporate Real Estate. *AREUEA Journal.* 18:4, pp. 522-529.

Rutherford Ronald D. (1992). The Impact of Sale-Leasebacks Transactions on Bondholder and Shareholder Wealth. *Review of Financial Economics.* 2:1, pp.75-81.

Rutherford, R. C. – Nourse, H. O. (1988). The impact of corporate real estate unit formation on the parent firm's value. *Journal of Real Estate Research*, vol. 3 nro. 4, 73-84.

Schallheim – Johnson – Lease – McConnel (1987). The Determinants of Yields on Asset Leasing Contacts. *Journal of Financial Economics*, 19. 45-67.

Schipper K. – Smith A. (1986). A comparison of equity carveouts and seasoned equity offerings: Share price effects and corporate restructurings. *Journal of Financial Economics* 15:1, pp. 153-186.

Seiler S. J. – Chantrath A. – Webb J. R. (2001). Real Estate Ownership and the Risk and Return to Stockholders. *Journal of Real Estate Reseach* 22:1, pp. 199-212.

Slovin, Myron B. – Sushka, Marie E. – Polonchek, John A. (1990). Corporate Sale-and-Leaseback and Shareholders Wealth. *Journal of Finance*, 45:1, pp. 289-299.

Smiths Clifford (1986). Investment Banking and Capital Acquisition Process. *Journal of Financial Economics* 15, pp. 3-30.

Smith, Clifford – Wakeman, McDonald (1985). Determinants of corporate leasing policy. *Journal of Finance*, 40, pp. 896-908.

Stulz R. M. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics* 26, pp. 3-27.

Tapscott, Don (1996). *Digital Economy – Promise and Peril in the Age of Networked Intelligence.* New York, McGraw-Hill.

Vaihekoski, Mika (2004). *Rahoitusalan sovellukset ja Excel.* WSOY, Helsinki.

Vijh Anand M. (2002). The positive announcement-Period Returns of Equity Carveouts: Asymmetric Information or Divestiture Gains? *The Journal of Business* 75:1, pp. 153-190.

Warner J. B. (1977). Bankruptcy costs: some evidence. *Journal of Finance* 26, pp. 337-348.

Weatherhead, M. (1997). Real Estate in Corporate Strategy, Macmillan Press, London.

Weston J. F. (1970). The nature of significance of conglomerate firms. *St. John's Law Review* 44, pp. 66-80.

Woollam Charles (2003). Flexibility at any price? Challenging a costly convention of leases. *Journal of Corporate Real Estate.* 6:1, pp. 73-82.

Woudenberg, Elias (2000). The impact of Corporate Real Estate on Corporate Economics. In a compiled work of Dewulf G. – Krumm P. – de Jonge H. *Successful Corporate Real Estate Strategies.* Arko Publisher, Nieuwegein.